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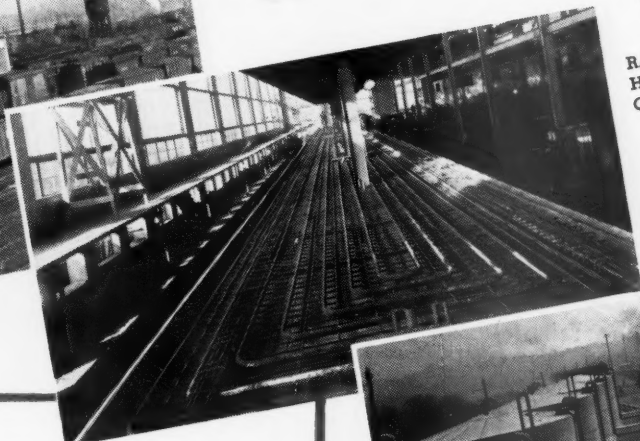
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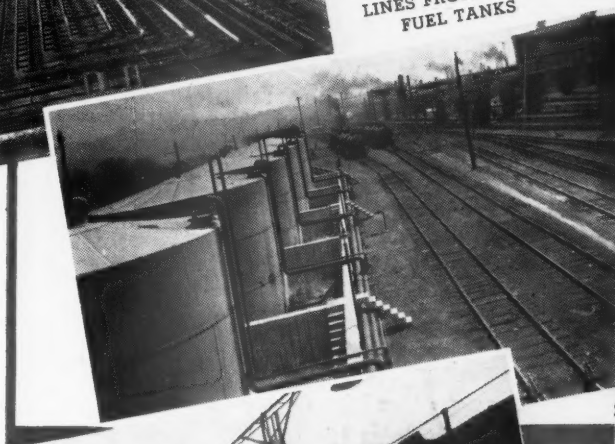


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With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office.

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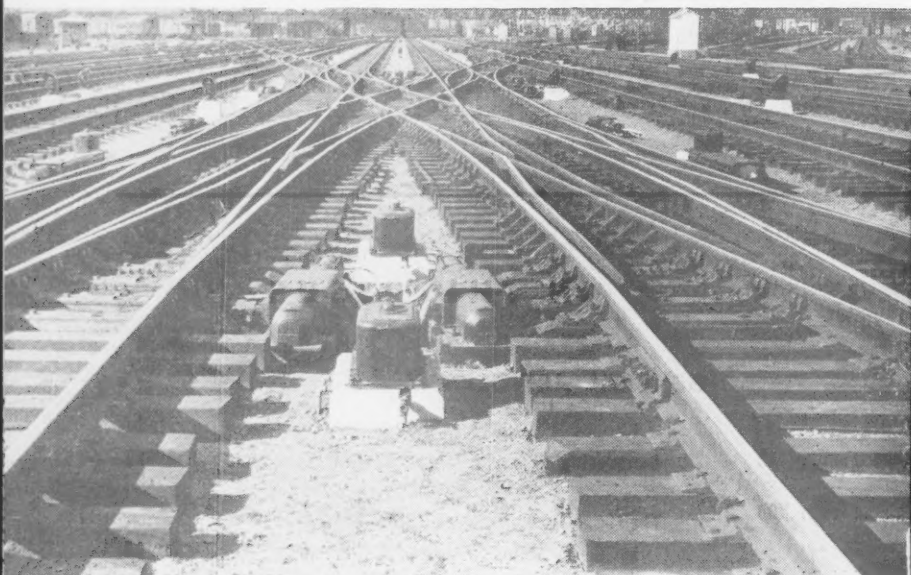
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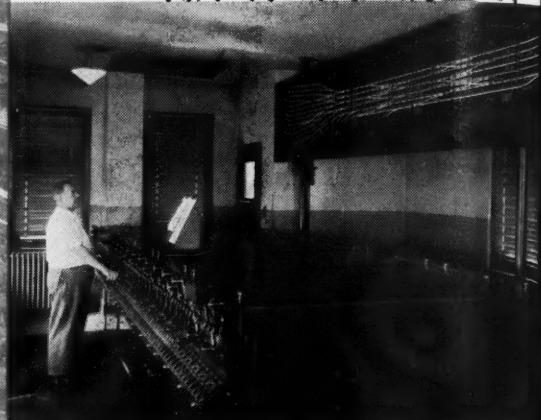
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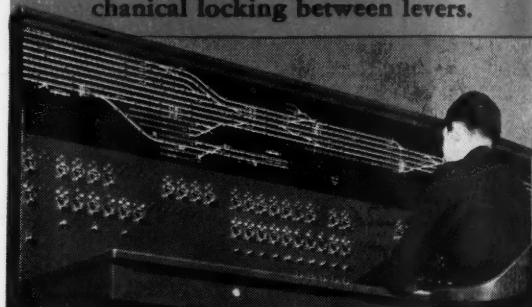
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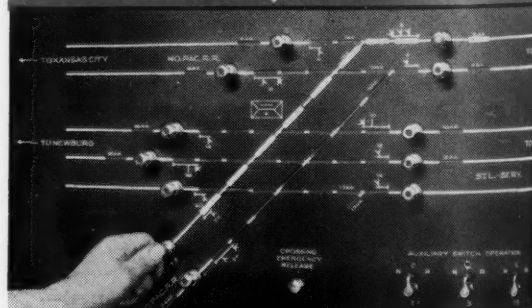
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HOW TO REVERSE THE TREND TOWARD SOCIALISM

Business leadership in this country has followed much the same policy toward domestic socialism that the United States government has pursued toward militant Communism abroad—namely, it has temporized with it and let it grow, seeking at all costs to avoid a definite show-down. The increasing boldness of Communist pressure has at length, however, stiffened the backbone of the federal government in confronting it. Perhaps the re-election of Mr. Truman on a platform of forthright socialism may serve similarly, before it is too late, to bring American business to the realization that its very existence is in immediate peril.

Obstacles of Habit

All habit and tradition of business management put obstacles in the way of the political analysis and strategy wherein, alone, it may expect salvation. Business executives are schooled in matching their wits against each other and thoroughly enjoy it—but most of them have small zest for acquiring the knowledge, skill and self-confidence they need for successful operation in the arena of politics. Nevertheless, when warfare takes to

the air, success in combat requires the development of an air arm—and when success in business is threatened by the general acceptance of political doctrines incompatible with the continuance of private enterprise, then the business executive who neglects to develop the vigor and skill for effective proselytizing in the principles of freedom is a poor selection for his job.

How can business executives most effectively go about mounting a counter-offensive against the socialism which threatens to overwhelm them? *First of all*, they can resolutely withdraw patronage of any kind from publicists and media who aid or temporize with a socialist political program, and transfer their support to individuals and institutions whose loyalty to the principles of freedom is complete, intelligent and unquestionable. *Quite as important*, they need, themselves, to learn enough about the principles of freedom to enable them to avoid the suicidal error of conspicuously failing to practice the doctrine they preach; and they need this schooling also because, without it, they cannot discern between the true friends of freedom and those who falsely claim to be friends.

There is no more sound or lucid exponent of the principles of economic and political freedom than

F. A. Hayek, author of the well-known "Road to Serfdom." In a more recent work* Hayek observes:

If during the next few years . . . a continued movement toward more government control in the greater part of the world is almost certain, this is due, more than to anything else, to the lack of a real program, or perhaps I had better say, to a consistent philosophy of the groups which wish to oppose it. The position is even worse than mere lack of program would imply; the fact is that almost everywhere the groups that pretend to oppose socialism at the same time support policies which, if the principles on which they are based were generalized, would no less lead to socialism than the avowedly socialist policies . . . In a democratic society, at any rate, once the principle is admitted that the government undertakes responsibility for the status and position of particular groups, it is inevitable that this control will be extended to satisfy the aspirations and prejudices of the great masses.

There is no hope of a return to a freer system until the leaders of the movement against state control are prepared first to impose upon themselves that discipline of a competitive market which they ask the masses to accept. The hopelessness of the prospect for the near future indeed is due mainly to the fact that no organized political group anywhere is in favor of a truly free system.

Socialism in Transportation

There is no place in the whole economy where the principles of economic freedom are being more flagrantly violated by business leaders, and no place where socialist doctrines are being more conspicuously condoned, preached and practiced, than in transportation. Great corporations whose names are the very symbols of large-scale private enterprise are practically the sole beneficiaries of the nation's improved inland waterways—the most completely socialized enterprise on the North American continent. Yet who ever heard of one of these corporations protesting this largesse from the public treasury, or seeking, as a matter of principle, to put these facilities and other government-owned, long-haul transportation on a basis of self-support from tolls? Everybody who knows any economics knows that tolls and not taxes—not even taxes exclusively on users—are the only means of financing publicly owned transport plant consistent with continued *private* investment in competing facilities, i.e., the railroads.

Not only are respected private corporations practicing and advocating socialism all over the lot, in transportation—but the victims of their transgression, e. g., the railroads, are too timid to turn the spotlight on the miscreants, lest they take offense. So there is vague complaining about "subsidized competition" which convicts no sinners and wins no converts. Unless business leadership can bring itself to an understanding of and loyalty to the principles upon which its very

* "Individualism and Economic Order," published by the University of Chicago Press. There are 12 chapters in this book and, as Hayek points out in his introduction, only four of them are suitable for general reading. It is, however, a safe assumption that the entire political and economic outlook for this country would undergo a quick about-face if business leadership would read and act upon the information conveyed in, even, but two of these four chapters.

existence depends, abstaining from conspicuous flouting of these principles, there is small likelihood that it is going to sell its ideology to farmers, organized labor, and the man in the street. Socialism cannot be defeated and economic freedom restored unless the votes of these numerous groups are won over.

Those inclined to be discouraged at the depth of economic and political ignorance and indifference, even on the part of leaders of great enterprises, should take heart in the fact that it is only when misbehavior sinks to the abyss of discomfort and fear that revolutionary reform can be expected. The prodigal did not return to his father's house when his funds first ran low, but only after he was reduced to sharing the husks with the swine. The great energy and intelligence which went into the establishment of the successful organization known as Alcoholics Anonymous were not born in people whose alcoholic indulgence was only moderate. Moreover there is more educational and proselytizing value in the reform of a conspicuous offender than in one whose peccadilloes are moderate and little known. There is probably nothing which could win so many converts so quickly to an understanding and acceptance of the principles of free enterprise as sudden and well-publicized obedience to these principles on the part of the large corporations which are now so flagrantly violating them in transportation. In this situation lies the greatest hope for the future of the railroads.

ROLLING EQUIPMENT

Progress in improving the character of passenger trains during the past year has involved no marked changes from the familiar patterns of the two earlier postwar years. Diesel-electric locomotives continue to be installed in passenger service and each year handle an increasing portion of passenger train service. The new passenger cars acquired during the past year are characterized by the variety of their interior arrangements.

Little change has taken place during the past year in total passenger train-mile and passenger-train car-mile movement. Passenger train-miles in August, 1948, had declined but a fraction more than one per cent from August, 1947, and passenger-train car-miles were practically the same for both months. The number of steam locomotives assigned to road passenger service, however, had declined from 5,444 on August 31, 1947, to 4,931 a year later, a decline of upwards of nine per cent. The number of Diesel-electric passenger locomotives had increased from 563 to 801, an increase of 42 per cent. Passenger train-miles produced by steam lo-

comotives during August, 1948, had declined 16 per cent, while those produced by Diesel-electric locomotives had increased 41 per cent. In August, 1948, steam locomotives handled 18½ per cent less passenger-train car-miles, while Diesels handled 44 per cent more than during August, 1947. Of these car-miles in locomotive-hauled trains in August, 1947, steam locomotives produced 65.4 per cent. In August, 1948, this had declined to 53.3 per cent. The corresponding Diesel percentages were 28.1 in 1947 and 40.3 in 1948.

Intensity of utilization, based on the number of locomotives assigned, has shown some decline for both steam and Diesel locomotives during the past year. In fact, such a decline has been evident since 1946, though somewhat less in the case of the Diesel than of the steam locomotive. Similarly, the number of passenger-train cars per train has been declining since 1945, although there was a slight increase in the number of cars in Diesel-hauled trains in August, 1948, when steam trains averaged 8.8 and Diesels 11.3 cars per train. The monthly utilization of Diesel locomotives assigned to passenger service is between three and four times as intensive as the utilization of steam locomotives, but this will change as the proportions of service handled by Diesels increases. The performance of both will be adversely affected, but the steam probably more than the Diesels.

An outstanding feature of the improvements in passenger service from the viewpoint of its attractiveness for the patron has been the departure from the long-time standard interior arrangements of sleeping cars, parlor cars, and coaches, which began when the first lightweight, streamline, articulated trains were built in 1934. Variety in the arrangement of the long, narrow space within the car body and in interior decorative treatment has been a factor in attracting patronage to the railroads.

Variety of arrangement, however, can only be had at a price—an increase in the expense of engineering and interference with effective production in the plants of the builders. Variation of arrangement and of interior equipment of passenger-train cars has been carried to a point where both car builders and railroads are giving serious consideration to measures for reducing their effects on the builders' costs and on the prices which the railroads have to pay.

The problem is not simple. To return to the kind of invariable standards which prevailed prior to 1930 would be a backward step and not progress. A marked improvement can be effected, however without going this far. In one case, for instance, a modern train in which there were four or five different interior car arrangements was designed so that one car structure, without change of members, served for all of the cars in the train.

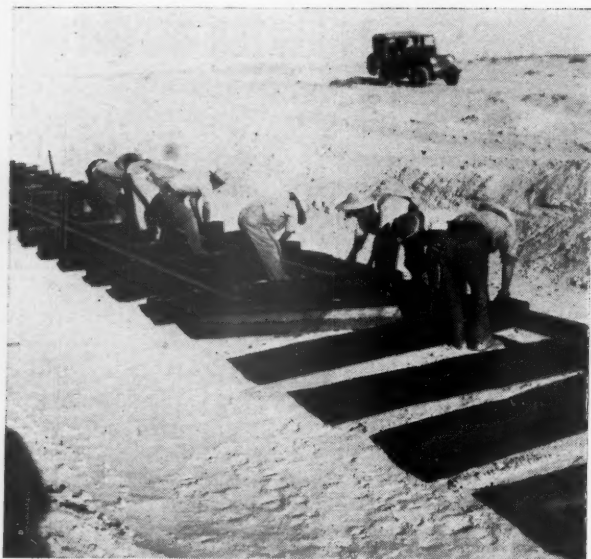
A. A. R.—A PROGRESS REPORT

There is a lot for the railroads to be thankful for in the record of the Association of American Railroads, at the completion of its first full cycle between annual meetings under the new regime. Aside from the performance of its important routine functions, the A.A.R. during the past year has consciously aimed at four major objectives, viz., (1) increasing the rate of return earned by the railroads; (2) elimination of the freight car shortage; (3) strengthening the presentation of the railroad point of view on projected legislation; (4) expanding its effort toward improved public relations.

Progress can be reported in all four directions. The rate of return, while still far less than it should be, rose from 2.75 per cent in 1946 to 3.41 per cent in 1947 and should attain 4 per cent or even slightly better in 1948. The car shortage has been cut in half in the past year, despite limited supplies of materials for new car construction and only a microscopic decline in weekly carloadings. On the legislative side, the association added to its staff during the year and can take satisfaction in the enactment of the "Mahaffie Law" for railroad reorganization, in the sliding scale legislation for unemployment benefits, and in the successful passage of the Bulwinkle Bill over a presidential veto—a hard-fought battle which was not paid for at the price of engendering a lot of costly bitterness. Meantime, none of over a hundred bills in Congress, adverse to the railroads, was enacted.

In public relations, what is probably the most valuable part of the A.A.R.'s effort is, like an iceberg, largely below the surface and not noticed. It consists in the set-up by which the public relations organization receives and answers hundreds of thousands of inquiries and distributes vast quantities of informative pamphlet literature annually to people who *ask for it* and who are, as a consequence, a highly receptive audience. The public relations program has also, of course, been expanded in its visible aspect, notably by the radio programs inaugurated on October 4. Approval of this venture by railroad men is not unanimous by any means, but radio is an advertising medium for which objective testing methods of checking are highly developed. If these tests continue to show increased popular reception of the program, it can be continued—otherwise it can be turned off. The important fact is that the A.A.R. is proceeding, experimentally, to try to reach a greatly expanded audience for its educational message.

No one with the welfare of the railroads at heart will question the goals which the association has set for itself, or will fail to derive satisfaction from the fact that it is making noteworthy progress toward them.

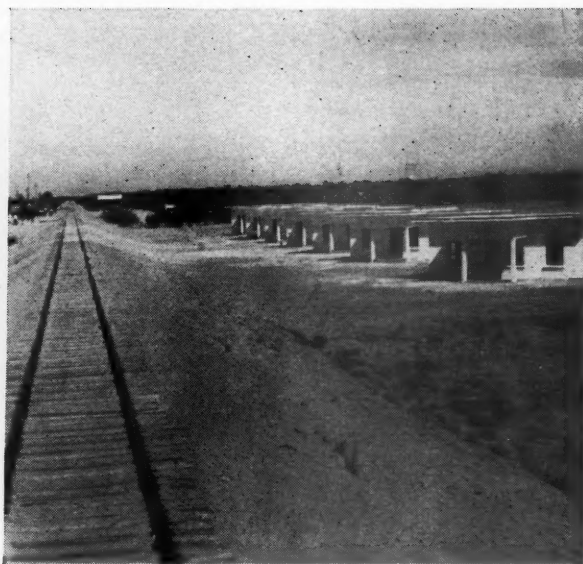


Left—Part of a track-laying gang on the new line, working near Puerto Penasco. Right—A view on the new line about 19 mi. from Pascualitos at the west end

CONQUERING A TORRID DESERT



A timber trestle carrying the line across a dry creek bed. As protection against flash floods the embankment slopes are covered with grouted riprap



The desert of Altar (left), crossed by the line, is one of the hottest areas in the world. Right—Many dwellings had to be built to house the employees of the line and their families

By ANTONIO DOVALI JAIME*

New line supplies the first all-Mexican rail link to the lower California peninsula. Construction made difficult by lack of water, absence of highways and temperatures as high as 122 deg.F.

When the last 285 mi. of the Sonora-Baja California railway were opened this year, the occasion marked the completion of a most important strategic and economic line. The new railway gives an all-Mexican outlet to the agricultural, fishing and mineral products of Lower (Baja) California, a Mexican state of immense potentialities that has remained largely undeveloped because of the complete lack of land transportation connections with the rest of Mexico, except via a circuitous route through the United States.

Saves 136 Miles

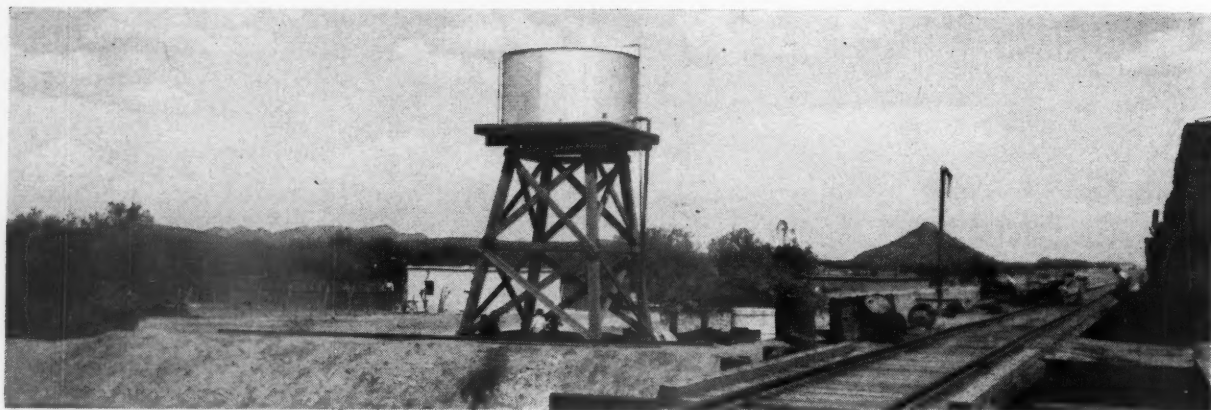
Formerly, freight from Lower California intended for other Mexican points was handled via the San Diego & Arizona Eastern (a subsidiary of the Southern Pacific) to Yuma, Ariz., the Southern Pacific proper from Yuma to Nogales, and thence via the Southern Pacific of Mexico and connections to destination. The

*Mr. Jaime is director general of railroad construction, Ministry of Communications and Public Works of the Mexican government, and in this capacity was in charge of construction of the Sonora-Baja California line.

new route extends entirely through Mexican territory between Mexicali, Lower California, and Benjamin Hill, Sonora, the latter point being a junction with the S. P. of Mexico, 93 mi. south of Nogales. About 136 mi. are saved via the new route, and customs examinations at both Yuma and Nogales are avoided.

The project of an all-Mexican railway line to Lower California has been discussed at length for many decades. Until the last few years, however, the desert of Altar has supplied an insurmountable barrier. This desert extends from the Gulf of California on the south to the United States border on the north, and for 190 mi. in an east-west direction. It is one of the hottest deserts in the world, with temperatures of 122 deg. F. being of common occurrence. As recently as 1937 a railway locating engineer and his entire party died of heat and thirst while attempting to survey a line across this desert.

There are no highways across the desert and the difficulties of building a railway line in such a place are obvious. Another deterrent was the difficulty of providing an adequate water supply for steam locomotives in this arid wasteland where the average an-



The provision of adequate water supplies for locomotives presented a difficult problem. This view shows the water-storage tank at Trincheras, Sonora, near the easterly end of the line

nual rainfall is only 300 millimeters (11.8 in.). The use of Diesel-electric locomotives was decided upon by the Department of Railroad Construction. It proved to be a particularly advantageous application of this type of motive power.

History of Construction

In 1923, a 43-mile railway line was constructed between Pascualitos, a junction point just south of Mexicali, and Fuentes Brotantes. Mexicali is the capital of Lower California and is situated immediately across the border from Calexico, Cal. It is on the main line of the San Diego & Arizona Eastern between Yuma and San Diego. At that time, prior to the construction of Hoover Dam, the Mexican section of the Colorado river was a wild unpredictable stream, and a temporary wooden structure was built across it.

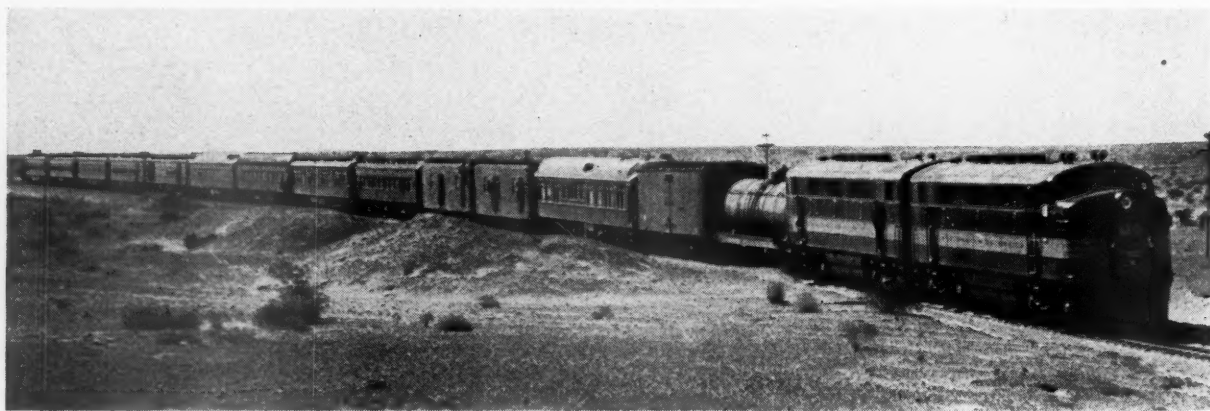
After this initial work the project remained static until 1936, when it attracted the attention of President Lazaro Cardenas, who ordered that the work proceed. Construction was then continued eastward to El Doctor, on the western edge of the Altar desert, and beyond to Puerto Penasco which was reached in 1940. The experience gained in building from El

Doctor to Puerto Penasco, 92 mi. across the desert, was invaluable for the later and more difficult desert construction east of the latter point.

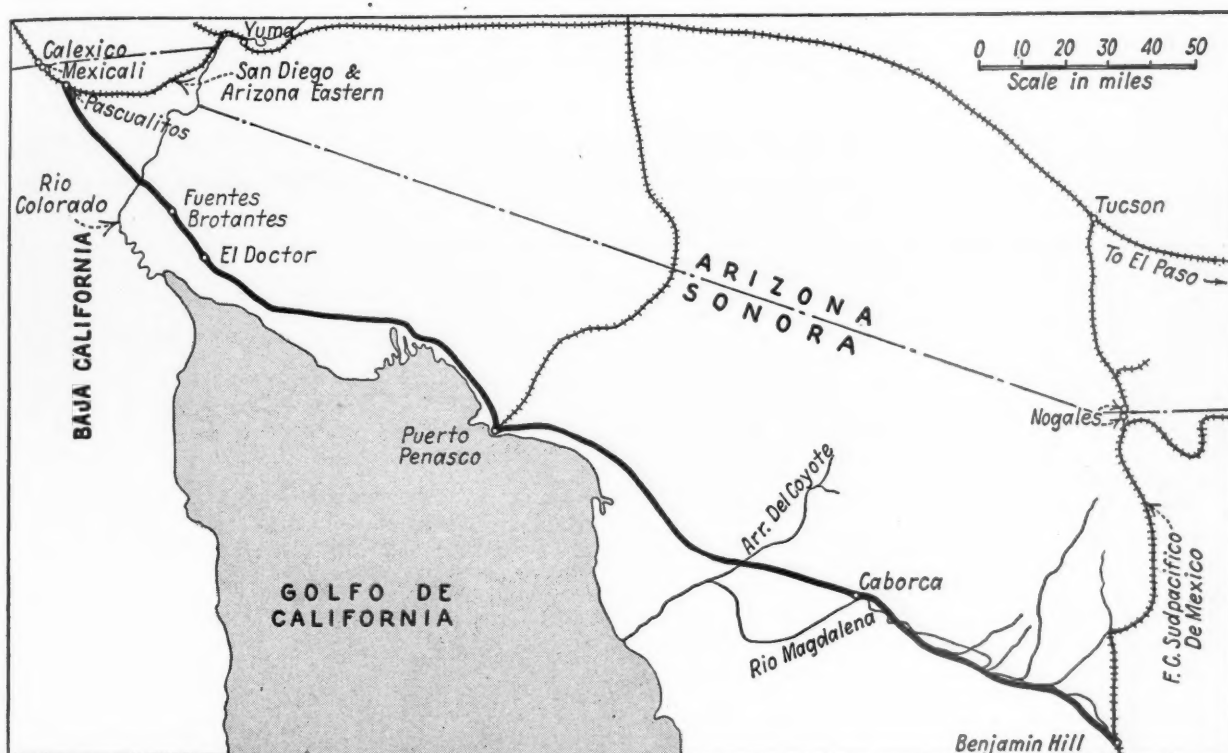
After the completion of Hoover Dam precluded further recurrent floods in the Colorado river, a semi-permanent bridge was built over that stream, consisting of six steel spans having a total length of 443 ft. The approaches of this bridge consist of open-deck wood trestles, one of seven spans on the right bank and one of 38 spans on the left bank.

Despite the meager rainfall, this area is subject to flash floods that rush down the arroyos as in all desert country, and 161 bridges were necessary between Pascualitos and Puerto Penasco—with a total length of 6,243 ft. These are all wood structures, with the piles set in concrete. In addition, concrete culverts of various sizes supply drainage at places where the volume of water is less. The grading on this line amounted to 1,765,800 cu. yd. The maximum curvature is 6 deg. and the maximum grade 1.25 per cent. New 90-lb. and 80-lb. rail was laid on this line, and tie plates were used.

Between 1940 and the time the new through connection was established this year, the Pascualitos-Puerto Penasco line handled 1,285,562 passengers and 181,000



Trains operating over the new line are powered exclusively by Diesel-electric locomotives



This map shows how the line provides an all-Mexican rail connection between Benjamin Hill, Sonora, and Baja (Lower) California, avoiding a circuitous route through the United States

long tons of freight. Traffic volume has, of course, shown a huge increase since the new line was completed.

Faster Construction

Difficulties in obtaining materials practically stopped progress during the war, but work resumed when conditions permitted and on June 11, 1946, the first rail was laid on the Puerto Penasco-Benjamin Hill section of 175 mi. Despite the difficulties of desert construction, the line was completed in 18 months. This is in noteworthy contrast to the three years required to build the Fuentas Brotantes-Puerto Penasco section of 107 mi. The reasons for the greater speed were twofold—the improved methods resulting from the experience gained in the earlier construction, and increased mechanization on the later work. Grading for this segment totaled 5,476,596 cu. yd. The use of air compressors was far more widespread than on the previous job.

The eastern end of the line, Caborca to Benjamin Hill, 75 mi., follows the valley of the Magdalena river and the construction of this section did not present the problems encountered on the 100 mi. of desert between Puerto Penasco and Caborca.

There are 271 bridges having a total length of 12,867 ft. These bridges are constructed with wood superstructures on piles set in concrete blocks. While regarded as merely temporary until the necessary steel can be procured, such bridges have stood for 30 years in other sections of Mexico. The largest bridge, 1,312 ft. long, is over the Coyote river.

Because the country between Caborca and Puerto Penasco was uninhabited, the problems of securing labor and material and of transporting them to the job were extremely difficult of solution. To build the line, 48,000 tons of new 90-lb. and 80-lb. rail, with necessary fastenings, and 1,100,000 ties had to be transported. The latter included 186,000 creosoted ties for use on that portion of the line east of Puerto Penasco, which parallels the Bay of St. George. In this area the salt air quickly destroys untreated ties. Temporary highways had to be built and numerous temporary tracks laid for transporting the materials.

The men employed were specially selected for their ability to endure temperatures up to 122 deg. Even so, during the long summer in this latitude the construction work could be conducted only in the early morning and late evening.

It was necessary to transport thousands of tank cars of water to the men; also, to dig numerous wells and build water storage tanks.

Despite the fact that the line was built through relatively flat country, the torrid heat, the lack of inhabitants and of roads, and the complete absence of any water supply for 100 mi. made this one of the toughest jobs of railway construction ever undertaken.

Presidents Camacho and Aleman of Mexico both took a keen personal interest in the line. The work was carried out under the direction of the Secretariat of Communications and Public Works, whose engineering head is Augustin Garcia Lopez. The locating engineer who blazed the trail across the desert—in more senses than one in view of the intense heat—was Carlos Franco.

THE COAL-BURNING GAS-TURBINE LOCOMOTIVE

A report on the status of the Locomotive Development Committee project that indicates completion "is not just around the corner"

By C. K. STEINS
Mechanical Engineer, Pennsylvania

The coal-burning gas-turbine locomotive project contemplates the building of a 4,200-hp. locomotive by the American Locomotive Company using an Allis-Chalmers gas turbine, and a 3,750-hp. Baldwin locomotive using an Elliott gas turbine. The two locomotives are one project and the development work is being carried on by the Locomotive Development Committee of Bituminous Coal Research, Inc., a group composed of nine large railroad companies and four coal companies. R. B. White, president of the Baltimore & Ohio, is the chairman of this group, and J. I. Yellott is director of research. The work is now in its fourth year.

Evolution of the Gas Turbine

The concept of the gas turbine is not new. It goes well back in history, and perhaps followed windmills and water wheels in the thinking of early inventors. But very hot gases are hard to handle and, until recently, the metallurgists and technicians did not have the proper tools to progress the gas-turbine idea. John Barber in 1791 was issued a patent on the basic features of the gas turbine and other inventors have taken out patents up into the early part of the twentieth century, but the hurdles of efficient compressors and suitable metals were always present. During this period the reciprocating steam engine, the steam turbine, and the Diesel engine—which, no doubt, had their own problems, although I think it can be said they were less difficult to solve—advanced rapidly and entrenched themselves as prime movers in the fields for which they were best suited.

The appeal of the gas-turbine power plant lies mainly in the fact that essentially it is a simple machine, requiring no boiler, boiler water, water treatment, condenser, or other parasitic apparatus, and no reciprocating machinery is involved. The gas-turbine power plant uses a compressor to deliver very large quantities of air to a combustion chamber where fuel is mixed with the air and burned. These products of combustion are directed into the blading of a turbine not essentially different from a steam turbine.

As these gases pass through the turbine blading, they expand and cause the turbine to rotate. A great deal of work has to be done by the compressor to compress the enormous quantity of air required to burn the fuel with which it mixes in the combustion chamber, air not only sufficient to burn the fuel but

eight or ten times more to keep the gases down to a temperature which the combustion-chamber material and the turbine blade material can stand. With so large an amount of work to be done by the compressor, it will be appreciated that unless the job is done efficiently, the gas turbine has about all it can do merely to drive the compressor which is coupled to its shaft, and no net power, or only a small amount, will remain for useful work.

An efficient gas-turbine layout as the art has advanced up to the present will have a turbine putting out four units of work and, of these, roughly three units will be used by the compressor and other losses. Very close to one unit remains for the useful work of driving a generator or other form of power take-off. The coal-fired gas-turbine locomotive with electric transmission is expected to produce 20 hp. at the rail for every 100 hp. of heat energy in the coal. Expressed in the usual way, the locomotive's thermal efficiency will be 20 per cent. This compares with 26 per cent for the Diesel-electric and $5\frac{1}{2}$ to 6 per cent for the modern steam locomotive.

One of the most efficient forms of compressors is the axial flow type. This was brought out commercially about 1901 and it has been improved until its efficiency is now around 85 per cent. Enormous strides have been made in the development of heat-resisting materials, particularly immediately before and during World War II, and it is this combined progress in compressor efficiency and materials that has put the gas turbine in the forefront of prime mover thinking. Atomic energy is unlikely to push the gas turbine aside; atomic energy, when it comes into commercial use, will probably be in the form of heat, and that clean heat looks promising as a means for producing hot gases for a gas turbine. The coal industry need not be concerned about this for some time to come.

Why Burn Coal?

The Locomotive Development Committee was given the task of designing and building a gas-turbine plant that would use coal as its fuel and be suitable for mounting on a locomotive chassis. There were two powerful reasons for specifying that coal be used: first, a million B.t.u. of coal costs 20 cents today as against 90 cents for the same amount of energy in Diesel fuel and, second, we have an abundance of

An address delivered before the National Coal Association at New York on October 5, 1948.

coal in this country. Even if a low-grade liquid fuel—i.e., one containing $1\frac{1}{2}$ to 2 per cent ash—can be burned successfully in a gas turbine, we would pay 60 cents for a million B.t.u. which still leaves coal in a very favorable position. Widely divergent statistics have been published about our oil reserves and there is some doubt as to just what the true situation is, but I do not think there is much question that, in a national emergency, fuel oil for locomotive use would quite likely be in short supply just as it was in the last war.

It would not have been necessary to set up a group to progress the development of a gas-turbine locomotive to burn liquid fuel. The gas-turbine principle is attractive enough to engineers in its own right to provide the incentive for such a development. That this incentive exists is evidenced by the fact that today several large companies are making splendid progress in developing liquid-fuel gas-turbine prime movers for locomotive use and one such locomotive is already on order by the Atchison, Topeka & Santa Fe.

The coal-burning gas turbine, however, is quite another thing from one burning liquid fuel, and to say that it is an exceedingly tough nut to crack is no exaggeration. Many developments are merely the assembly of proved parts into a workable combination, but not so the coal-burning gas turbine. Let us consider the key problem in this project.

Drying and Crushing

First, a coal bunker will be carried on the locomotive for run-of-mine coal with a crusher to break up the large lumps to minus 2 in. size. The hopper of this bunker will be arranged with a means of heating to reduce the moisture content of the coal to not over 5 per cent. A stoker type conveyor will then carry the dry coal to a preliminary crusher. These steps are simple and, of course, there is a good deal of precedent to guide the designers.

Second, we must have a preliminary crusher to get the coal down to about minus 16 mesh size. This is about the size of granulated sugar. It is nowhere near the final size required and in some manner we must get it down to where not less than 90 per cent will pass through a 200 mesh sieve and a large percentage of this through a 325 mesh sieve, that is, about the size of flour. When you consider that these particles must be completely burned in the combustion chamber in about two tenths of a second, the need for microscopic particle size is apparent. The preliminary crusher just mentioned might also be the final crusher and that may eventually be the solution, but such a crusher would be so large that it would be difficult to find room for it on the locomotive and the power to drive it would be in the order of 200 hp. That, of course, would be deducted from the power available for hauling the train.

Let us assume in this discussion that we will only grind the coal to granulated sugar size in our preliminary crusher, as that does not take too much power, and that the final minute size will be got by some other means. We have been trying to get this final size by picking up the particles in a fast-moving stream of air and smashing them against a target of highly

erosion-resistant material. The particles will be traveling at about 700 miles per hour when they hit.

Getting the particles in this fast-moving stream of air has been a pioneering effort of no small proportions. No device is available on the market to do this, but there was an idea of a rotating cylinder with pockets in the periphery, the pockets being filled by gravity as they pass under the hopper of a small bin filled with the granulated-sugar-size coal. Something like a Ferris wheel, except that people do not drop into the cars at the top and get shoved out by a stream of air at 160 lb. gage pressure at the bottom. That, however, is the idea we are working on for pressurizing the coal. Unless we have the coal under slightly higher pressure than the air being delivered to the combustion chamber by the compressor, we simply cannot get the coal into the combustor to be burned. The coal-laden pockets rotate to the bottom where the stream of air at right angles to the wheel cleans out the pockets and carries the coal along to the target for its final pulverization. The wheel can be rotated at a sufficiently high speed to give for all practical purposes a continuous flow. The means for governing the amount of coal that drops into these pockets becomes the locomotive throttle.

It is no small problem to design such a pocketed wheel with machine clearances in the order of four thousandths of an inch, but that is the kind of machine tolerance needed to prevent the air at 160 lb. pressure in the target line from flowing back along the sides and around the periphery of the wheel into the small gravity bin and stopping coal delivery. The side faces of this wheel will rotate against seals which must have long service life. We had a number of failures in building these wheels, but a recently designed one has given a good performance after 50 hours of testing. We realize, however, that this is a relatively short time from the standpoint of locomotive use and we, therefore, cannot assume that we are out of the woods.

Pulverization Difficulties

I will not take time to describe in detail the target against which the coal is smashed to get it down to final size. In our early thinking, it was felt that the degradation of the coal in this apparatus resulted from filling the coal pores with high-pressure air and that, when the pressure was suddenly relieved by passing through the orifice into an atmosphere of lower pressure, the air trapped in the pores exploded the coal in much the same manner that puffed-wheat cereal is made. Research has shown that there is little, if anything, in this theory and that the degradation really results from smashing the coal against the target.

Some of the hardest known materials have been gutted out by the impact of the coal particles after only a few minutes of operation. Targets made of cast tungsten carbide are now giving good results. It begins to look now as if one target is not enough, that a few coarse particles bounce off, and that these coarse ones will have to be got out of the stream by centrifugal action and smashed against a second target.

This is the sort of thing that our research group

runs into as it goes along, and such problems have made a timetable very difficult to live up to.

The coal, after leaving the targets, is down to what we will call flour size. It is then ready to be directed into the combustion chamber and mixed with the compressed air and burned. The combustion chamber has been, and still is, a major problem. We are carrying on development work at the Kaiser steel plant at Fontana, Cal., this being the only place in the country where there is available a sufficient quantity of compressed air for full-scale experimentation. Combustor development is also going on at the Battelle Institute in Columbus and the Alco Products plant at Dunkirk, N. Y.

It now appears that the combustor will be a stainless-steel tube about 127 in. long by 25 in. mean diameter, with telescopic sections, the whole encased in a tube into which the air for combustion and cooling is delivered. One of these combustors will supply enough gases for the Allis-Chalmers turbine, but the Elliott will need two in parallel because it is designed to operate at a lower pressure and temperature. The pulverized coal is given a swirling motion as it enters the combustion tubes and the air for combustion and cooling enters the tube through holes and annular slots between the sections.

Intensive Heat Release

Consider that, in the case of the Allis-Chalmers single combustion chamber, coal will be burned at the rate of 70 to 80 lb. per min. at full load, depending upon the B.t.u. value of the coal; that 21,000 cu. ft. of air at 60 lb. pressure, 640 deg. F., must pass into the tube every minute for combustion and cooling; and that these products of combustion will emerge from the exit end of the tube in the order of 34,000 cu. ft. per min. at 1,300 deg. F. You will see from this that the residence time of each particle of coal in the 10-ft. tube is less than two tenths of a second, as I have already stated, during which time it must be completely consumed. Its ash, while it is still in a molten state, must not be permitted to impinge against any part of the tube and stick there.

It is interesting to compare this combustion problem with its heat release of a million and a half B.t.u. per cu. ft. per hr. with the heat release in the firebox of a modern pulverized-coal central-station boiler where the heat release is in the order of 30,000 B.t.u. per cu. ft. per hr. This problem arises from the fact that when you are building a locomotive, you must keep it within standard railroad clearances. It is obviously economically impossible to do anything about this.

A great deal of extremely valuable combustion information has been developed in the tests at Battelle, as well as at Fontana and Dunkirk, but we have warping problems, localized burn-outs, localized encrustations, difficulties in operating over the range from idling to full load—what we call the turn-down characteristics of the combustor—so that it cannot be said now that we have all the answers and are ready to go ahead and build. The armed services have been working for years with unlimited funds at their disposal to develop a long-life, efficient combustor for

jet planes, with no problem of coal ash to overcome, and they are still at it. We would gladly swap our problem for theirs.

Lastly, there is the problem of cleaning the products of combustion after they leave the combustor. Dirty gases cannot be directed against turbine blades at a speed of some 400 miles per hour. They would cut them to pieces. While there is evidence that particles so fine that they give only a slight haze to the exhaust—i.e., under 20 microns diameter—will not harm the turbine blading, we know there are large particles as well as small ones leaving the combustor. These large ones will have to be got out with a minimum of penalty in the form of pressure drop. After several months of work we felt that a battery of small cyclone separators was the answer to cleaning the combustion gases and that this part of the research was behind us, but on recent long-time tests at Dunkirk it was found that some burning went on in these tubes and this was enough to ruin them. There are now being developed two designs of cleaners, both of which appear to have possibilities, and we are hopeful that one or both of them will give gas sufficiently clean for the turbine to handle without being damaged. The big particles of ash that will be taken out can be collected in a small container and carried along to the locomotive terminal.

You will see from this brief resume of the project that the coal-burning gas-turbine locomotive is not just around the corner; that much hard work has been done, and much remains to be done before this new type of railroad motive power is on the rails.



New York harbor facilities were inspected by delegates to the 35th National Foreign Trade convention during a special ferry-boat tour on November 11, sponsored jointly by the Port of New York Authority and the New York Central

NEW AND IMPROVED PRODUCTS OF THE MANUFACTURERS

"ONE-SPOT" DIESEL SANDING STATION

Ross & White Co., Chicago, has designed a new Diesel sanding plant with sand delivery pipes radiating from a central overhead storage tank in such a way that all the variously located sand boxes of either a road or a switching locomotive can be filled without moving the locomotive after its original spotting. The plant may be constructed for either double or single-track operation.

The sand tower proper consists of an elevated steel tank, 5 ft. in diameter and 12 ft. 6 in. high, having a dry-sand capacity of 10 tons, mounted on a steel pipe column 24 in. in diameter. The tank is kept filled by a 2½-in. sand-elevating pipe connected to a sand drum. The sand-delivery pipes, tapped into the bottom of the tank, radiate outward from the tank, sloping downward at a 45-deg. angle for delivery of sand by gravity. Some of these pipes terminate at steel-column supports arranged in rows of four along each side of the track, while others, shorter in length, terminate at points almost directly over the track. Suspended from the end of each pipe is a length of flexible sand delivery hose, 3 in. in diameter, fitted with a "B & M" No-Leak heavy-duty sand valve.

The supporting columns at the ends of each side row of outlets are so located that, when a road locomotive is spotted for sanding, its side boxes can be reached by the delivery hoses at these columns. The intermediate columns and hoses in the side rows are located to give access to other side boxes of road locomotives and also to the side boxes of switching locomotives. The delivery hoses suspended from the pipes terminating above the track—a long and short hose at each point—are used to fill the front and rear boxes on switching locomotives coming in either forward or backward.

The design for this sand plant provides for a Quinn sand-dust arrester mounted on top of the dry sand tank. Also, provision is made for ladders reaching to various points of the plant. These ladders have square rungs for maximum safety, and the main ladder leading to the top of the plant has a safety cage. Directly beneath the sand tank is a rectangular service platform surrounded by a handrail.

Incorporated in the design is a continuous raised platform along each side of each track, with a safety rail along

the outer side. For further convenience in sanding locomotives each of these platforms has a hinged operators' platform along the track side.



Applying the new Wilson germicide to a safety device

GERMICIDE FOR SAFETY EQUIPMENT

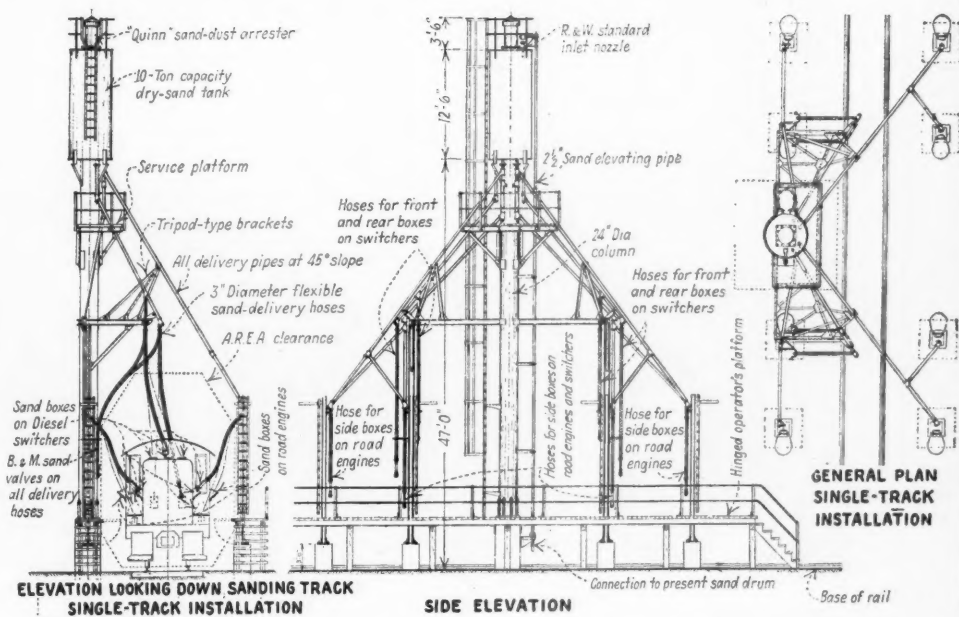
A new germicide for sterilizing personal safety equipment, such as gas masks, goggles, welders' masks, respirators, safety shoes or any washable apparel, which thereby protects workers from contamination through the use of such devices, is now being offered by Wilson Products, Inc., Reading, Pa.

The new product is a practically odorless solution which is said to be non-corrosive, non-staining, non-poisonous and non-irritating to the skin. It is claimed to be about 25 times more effective as a germ-killing agent than carbolic acid. In addition to its germ-killing action, the solution acts as a deodorant and fungicide.

The new germicide may be used as a spray, swabbing solution or immersion solution. It is said to be effective in hot or cold water in the recommended concentration of two teaspoonfuls to a quart of water, but users are cautioned not to mix the solution with soap.

"REFRIGERATOR RAMP"

A 15,000 lb. capacity ramp, especially designed for use where fork trucks will be used in the unloading of refrigerators.



General plan and two elevations for a single-track installation of the new Ross & White sanding station

erator cars, has just been put on the market by the Elizabeth Iron Works, P. O. Box 360, Elizabeth, N. J. It is being manufactured in two standard sizes, one of which will span gaps from 15 in. to 32 in. and the other, spaces from 24 to 44 in. The weight of these two units is 550 lb. and 600 lb., respectively. At the car end, width of these units is 44 in. while at the platform end they are 72 in. wide. A two-position door stop is said to assure a snug fit of ramp against wide or narrow car door sills.

The ramp is picked up and transported to position by a fork truck. The forks pick up the ramp by means of lift handles which drop flush with the riding surface when the ramp is in use. Once positioned by the fork truck operator, forks are withdrawn from the handles and the operator has only to insert the locking pins which secure the ramp in place.



Fork truck carrying "Refrigerator Ramp." At forward end can be seen door stops, while lift handles are in approximate center



The Marquette water cooler for use on Diesel locomotives

WATER COOLER FOR DIESEL LOCOMOTIVES

Developed specifically for use in Diesel locomotive cabs, the Marquette water cooler is a complete unit package that requires only a waste water outlet, a source of electric power and bolting to the floor to have cold water available within three minutes. The cooler is 9¾ in. wide, 13¾ in. deep and 33 in. from the floor to the top of the cabinet. It delivers 3½ gal. of water per hour at 50 deg. F. under conditions normally encountered in a locomotive cab.

The cooler has a stainless-steel water guard and alcove, copper tubing and a

large condenser and motor. The water bottle is firmly clamped in place and rests in a heavy rubber cushion. For servicing, the removal of four screws permits the side panel of the cooler to be slipped off and makes all working parts immediately available.

The water cooler is manufactured by the Marquette Railway Supply Company, 332 South Michigan avenue, Chicago 4.



The Metzgar gravity conveyor may be turned over to handle material wider than the conveyor frames

ROLLER CONVEYOR

A dual-purpose portable conveyor has been devised by the Metzgar Company, Grand Rapids, Mich., which may be used on one side for handling small items (the frame extending above the rollers to form a continuous guard rail), or may be turned over and used for handling material wider than the conveyor. This is possible because the roller axles are located off center in the frame, so that they project above the frame on one side, but are recessed within the frame on the other side.

Labyrinth ball races in the bearings of the rollers are designed to retain the original lubrication and keep out dust and water. The Metzgar conveyors are available in standard straight lengths of 5 ft. and 10 ft., and in 45-deg. and 90-deg. curves in lengths of 5 ft., 8 ft. and 10 ft. In use the conveyors are supported on adjustable tripods.

HOW RAILWAY EARNING POWER HAS SHIFTED

I.C.C. bureau's "Monthly Comment" uses comparisons of net before federal income taxes to point up changes since 1940; other articles on relationships of revenues and traffic to national income and population, the distribution of 1947 ton-miles by types of carriers, and the Diesel's current position as to performance and fuel consumption

Net railway operating incomes before federal income taxes for the 12 months ended with September, 1940, and 1948, have been compared by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission in an analysis designed to show "shifts in railway earning power" over the nine-year period. The analysis is given first place in the latest issue of the bureau's "Monthly Comment," which also contains articles on the relationships of railroad revenues and traffic to national income and population, the distribution of the 1947 freight ton-miles by types of carriers, and the Diesel-electric locomotive's current position as to performance and fuel consumption.

Class I Line-Haul Steam Roads

The figures used to indicate the shifts in earning power are for Class I line-haul steam roads, and the general showing is that increases since 1940 in both gross and "net" have been "much higher in the South and West than in the Eastern district and Pocahontas region." For all of the roads combined, the ratio of net railway operating income before income taxes to operating revenues dropped from 17.2 per cent in the 1940 period to 14.4 per cent in 1948. For the Western district roads, however, the ratio increased 2.1 percentage points, from 14.2 per cent in 1940 to 16.3 per cent in 1948. This compares with decreases of 6.2 points in the Eastern district, 13.2 points in the Pocahontas region, and 0.4 point in the Southern region.

Despite its large drop, the Pocahontas region's ratio is highest in both years—38.2 per cent in 1940 and 25 per cent in 1948. The respective figures for the Eastern district are 16.8 per cent and 10.6 per cent, while those for the Southern region are 15 per cent and 14.6 per cent. The Eastern district was in second place in 1940, when the Western district was in last place; their positions were reversed in 1948.

Earning Power Shifts by Roads

Another compilation in the analysis is that which makes similar comparisons for 36 large roads. The compilation shows that all but three of those roads—the Pennsylvania, New York Central, and Lehigh Valley—had higher net railway operating incomes before income taxes in the 1948 period than in 1940. However, there were numerous shifts in their rankings on the basis of net-to-gross ratios.

The Norfolk & Western, with respective 1940 and 1948 ratios of 43.7 and 33.9 held first place in both years, while the Chesapeake & Ohio dropped from second to seventh place, the Great Northern from third to eighteenth, the Pennsylvania from eighth to thirty-third, the Baltimore & Ohio from twelfth to twenty-seventh, and the New York Central from twenty-third to thirty-sixth. The N. Y. C. was thus in last place in 1948, with a ratio of 3.7 per cent, as compared with its 1940 ratio of 12.1 per cent. The Atlantic Coast Line, with a ratio of 5.4 per cent, was in last place in 1940; it moved up two places, to thirty-fourth, in 1948 when its ratio was 6.9 per cent.

Meanwhile, the St. Louis Southwestern moved up from twenty-second place in 1940 to second place in 1948; Denver & Rio Grande Western, from thirty-first to third; Chicago, Burlington & Quincy, twentieth to fourth; Atchison, Topeka & Santa Fe, from seventeenth to sixth; Union Pacific, from eighteenth to ninth; Wabash, from thirtieth to eighth; New York, Chicago & St. Louis, from tenth to fifth; Chicago, Rock Island & Pacific, from thirty-second to eleventh; and the Texas & New Orleans, from twenty-fifth to tenth.

Rail Revenues and National Income

The article on relationships of railroad revenues and traffic to national income and population includes a table which shows that railroad gross in 1947 was equivalent to 4.34 cents per dollar of national income, the latter being put at \$202.5 billion. The table also shows the 1947 freight traffic per capita at 4,567 ton-miles.

The figures, which run back to 1921, show generally a declining trend in revenues per dollar of national income, and an upward trend in the per capita ton-miles. The range in operating-revenue figures is from 1946's 4.3 cents to 1921's 10.39 cents. The per capita ton-miles totaled 3,886 in 1920, fell to a depression low of 1,885 in 1932, and then rose to a wartime peak of 5,363 in 1944. The 1947 figure of 4,567 compares with 1946's 4,212 and 1945's 4,901.

The article on the distribution of 1947 ton-miles presents preliminary figures showing that the intercity freight traffic in that year amounted to 995 billion ton-miles, of which the railroads produced 664.5 billion ton-miles, or 66.8 per cent, a drop from their 1946 proportion of 68.2 per cent. Meanwhile, the proportion

handled by truck rose from 7.3 per cent to 7.8 per cent. The detailed figures for the two years are shown in the accompanying table.

Transport agency	Tons-miles (billions)		Per cent of increase 1947 over 1946	Per cent of annual total	
	1946	1947		1946	1947
1. Railways, steam and electric, incl. mail and express	602.1	664.5	10.4	68.2	66.8
2. Highways, for-hire and private trucks ..	64.3	77.9	21.2	7.3	7.8
3. Inland waterways, incl. Great Lakes ..	124.0	148.4	19.7	14.0	14.9
4. Pipe lines (oil)	92.5	104.1	12.5	10.5	10.5
5. Airways (domestic revenue service, incl. express and mail) ..	.1	.1	235.1	3	3
Grand total	883.0	995.0	12.7	100.0	100.0

¹ Preliminary estimates.

² Airway ton-miles used in computing percentage totaled 77 million in 1946 and 104 million in 1947.

³ Represents only about .01 of one per cent.

Diesel Fuel Consumption

The idea for the bureau's analysis of the performance and fuel consumption of Diesel-electric locomotives, a footnote says, was suggested by the report on fuel oil for Diesels in relation to the supply of petroleum, which was made recently by the Electro-Motive and Research Laboratories divisions of the General Motors Corporation (see *Railway Age* of September 25, page 50). The analysis presents figures showing that, in the first eight months of this year, Diesel-electrics handled 19.7 per cent of the freight traffic and 38.4 per cent of the passenger traffic, and performed 34.7 per cent of the yard switching hours. The respective percentages for oil-burning steam locomotives are shown as 17.7, 18.6, and 8.8.

"Despite the fact that . . . Diesel-electrics handled more traffic than the oil-burning locomotives in all three classes for service," the bureau continues, "the number of gallons of fuel consumed by the Diesels was very much less than that used by the oil burners (676 million as compared with 2,246 million gallons). In road freight service the Diesels, on a gross ton-mile basis, handled 11.3 per cent more traffic than the oil burners but the latter consumed 371 per cent more fuel, as measured in gallons, than did the Diesels. It is generally understood, of course, that the fuel used in Diesels is of a higher grade of oil than that used in oil-burning locomotives. During the 1948 period the average cost of Diesel fuel was 10.46 cents per gallon as compared with 5.51 cents for fuel oil. However, the Diesels produced 560 gross ton-miles for each gallon of Diesel fuel consumed as compared with only 107 gross ton-miles per gallon of fuel oil used by the oil-burning locomotives.

"If the total number of gross ton-miles hauled by all types of locomotives combined (953.6 billion) in freight service during the first eight months of 1948 had been handled by Diesels alone, assuming the same performance indicated above, it would have required a total of 1,703 million gallons of Diesel fuel to produce the ton-miles involved. Oil-burning locomotives, however, actually used 1,583 million gallons of fuel oil in handling only 17.7 per cent of the

total gross ton-miles. In passenger and yard switching service the fuel consumption per unit of service is also more favorable to the Diesels than to oil-burning locomotives."

Drops Use of "Coal Equivalents"

On the matter of comparative fuel costs, the bureau notes that Diesel fuel accounted for only 13.8 per cent of the total spent for all fuel consumed in road and yard service during the eight months. Meanwhile, it had said that "no satisfactory conversion factors have as yet been developed by which all coal, fuel oil, Diesel fuel and electricity used by the various railways can be reduced to a common fuel equivalent basis." It then went on to announce that, "because of the recognized infirmities," it will discontinue the collection of data on "coal equivalents of petroleum and electricity used in transportation service." This had been recommended by the Committee on Statistics of the Accounting Division, Association of American Railroads.

Looking over the revenue traffic statistics of Class I roads for the first eight months of 1948, the bureau notes that the ton-miles of revenue freight were 1.4 per cent less than in the comparable 1947 period, while the revenue passenger-miles were off 10.5 per cent. By territories, the Southern region showed an increase of 0.7 per cent in ton-miles while decreases of 3.1, 2.3, and 0.5 per cent were recorded, respectively, for the Eastern district, Pocahontas region, and Western district. The 1948 passenger-miles were below those of 1947 in all territories, the range being from the 9.9 per cent drop in the Eastern district to the 13.8 per cent decline in the Pocahontas region.

Freight Revenue Up

Meanwhile, freight revenue for the eight months (\$5,204 million) was 14.8 per cent above that of the same 1947 period, the range of increases being from 10.8 per cent in the Pocahontas region to 15.5 per cent in the Western district. As the bureau points out, these increases "resulted largely from the higher level of freight rates in effect" during the 1948 period. Likewise did passenger-fare increases tend to offset the adverse effect on revenues of the decline in business. The passenger revenue of the 1948 period (\$640.4 million) was only 0.7 per cent below that of 1947's first eight months, the range by territories being from a decrease of 6.8 per cent in the Pocahontas region to an increase of 0.9 per cent in the Eastern district.

HERE'S A NEW ONE!

The new Chicago, Indianapolis & Louisville public timetable, issued September 26, contains a box volunteering the following information about the Monon's competitive train service:

"It is hoped that Monon train schedules will suit your convenience, but as a matter of information, schedules of other railroads between Chicago, Indianapolis and Louisville are shown below."

Complete through train schedules of the New York Central and the Pennsylvania are given, suffixed by a big, bold faced "Travel by Train."

RAILROAD REGULATORS SPEAK THEIR PIECE

**More "states' rights" in interstate rate hearings demanded by the
National Association of Railroad and Public Utility Commissioners**

With over 200 delegates in attendance, representing commissions in 40 states, as well as in Hawaii and Puerto Rico, the National Association of Railroad and Public Utilities Commissioners crammed much work into its sixtieth annual convention, held at the General Oglethorpe Hotel, Savannah, Ga., November 16-18. The convention was scheduled to be welcomed to Georgia by that state's governor, but in his absence the responsibility was delegated to John Bouhan, county attorney of Chatham county, and to Mayor John G. Kennedy of Savannah, both ardent disciples of the late, great Henry Grady. In responding on behalf of the association, J. F. Craemer, of California, created some sort of record by not mentioning his native state once.

W. R. McDonald, president of the association, and chairman of the Georgia Public Service Commission, confined his presidential address to an account of his stewardship since the association's last meeting in Boston, 16 months ago. He mentioned service shortages as the commissions' outstanding problem and recommended action on the part of the association to find the answer to some of the bottlenecks caused by materials shortages. He did not advocate a return to government control but stated that the voluntary method of allocation employed by private industry needs a housecleaning.

He chided the Interstate Commerce Commission for what he described as its attitude toward the cooperative rate-making panels of the state commissions. Using the term "questionable authority," he said, "in the administration of the Interstate Commerce Act a construction of greatest limitation has been placed upon what I construe to be a right—not a privilege—of the state commissions to participate as peers in the deliberations of the I.C.C. in cooperative cases."

He outlined the moves made by the association in its guise as a protestant in railway rate increase cases. He stated that the association has already advised the I.C.C. that it will enter an appearance in Ex Parte 168 as it did in Ex Parte 166, in which case Dr. Richard V. Gilbert was employed by the association as consulting economist to present railway operating and financial data in a way to contradict some of the railroad testimony.

Election of Officers

The officers elected to guide the association in a full program of legislative and other activities for the coming year were J. F. Craemer of California, president; C. L. Meins of Massachusetts, first vice-president; and

H. S. Miller of Ohio, second vice-president. F. G. Hamley was re-elected general solicitor and Ben Smart and Stanley Allison were re-elected secretary and assistant secretary, respectively. The date and place for holding the next convention were left to the executive committee for later decision.

Resolutions Adopted

Aggressive policies in the fields of transportation, communication and public utilities were adopted in the form of resolutions. Those affecting transportation are described in the following paragraphs.

The association believes that active steps should be taken to rid the national economy of the burdensome federal excise taxes on transportation, pointing out that these were purely wartime measures for which the need has long ceased to exist. In addition, all such taxes are discriminatory against long-distance users of transportation and remote centers of population and are further discriminatory against public transportation agencies required to collect such tax and in favor of private carriers not required to collect it. Such taxes, the association maintains, operate to raise the price of commodities to consumers and the substantial rate increases since the war have brought about a great and unintended increase in excise tax revenue per unit of transportation, with a consequent unanticipated burden upon the users of such service.

The association also passed a resolution favoring the enactment of legislation amending section 77-B of the Bankruptcy Act, to reinstate and preserve the jurisdiction of the state commissions respecting the regulation of intrastate service and rates of railroads undergoing reorganization.

Transportation Agencies' Service

Several of the committee reports dealt with telephone, gas, electric and other public utilities companies. Of those dealing with transportation, the report of the committee on service and facilities of transportation agencies, of which Guy R. Johnson of the Pennsylvania Commission was chairman, outlined the improvements in rail passenger and freight transportation in great detail, crediting *Railway Age* as the source of such data. In discussing air transport, the committee quoted traffic figures showing that the air lines carried 13,189,366 passengers in 1947 and handled 30,103,373 express ton-miles and 40,702,258 freight ton-miles, all of these, and particularly the last figure representing substantial

increases over 1946. "That the air lines carried more passengers and cargo than ever before," the report states, "did it more efficiently and yet lost more money than in any other year was a startling paradox." Except to say that the air lines laid off some 10 per cent of their employees in 1947, the report does not substantiate its statements as to the efficiency of the air lines.

Summarizing all transportation agencies, the report states: "In the field of aviation the trouble may be diagnosed as growing pains, perhaps the result of enthusiastic over-estimate of its status, coupled with lack of the long-term experience necessary to coordinate properly the demands for service and the revenues therefrom with the costs incident to providing that service. In the case of the railroads, rapidly mounting operating ratios have apparently acted to delay replacement and expansion of plant facilities in proportion to the increased demand for service. Highway carriers of both persons and property are confronted with problems arising from rapidly mounting costs in the face of retarded rate increases."

Other Committee Reports

The special committee to promote uniformity of regulations affecting motor carriers, of which L. W. Cannon of Indiana was chairman, devoted its attention to the elimination of "restrictions" on truck operations. "During the war," says the report, "a uniform plan for regulating the sizes and weights of commercial vehicles was put into effect by executive proclamation. At the conclusion of the war, many states passed legislation to retain these standards or to liberalize further restrictions of sizes and weights." The committee hailed the showing that, during 1947, no less than 23 states "liberalized" size and weight restrictions on trucks and it asserted that the trend has continued unabated through this year.

The report of the committee on progress in the regulation of transportation agencies, of which J. A. Robertson of Kansas was chairman, gave a brief resume of important I.C.C. decisions, all of which have been reported in *Railway Age*. In discussing the air lines, this committee dug up the fact that, in a recent survey made among passengers on the 19 air lines serving New York, it was discovered that 39 per cent of the passengers had incomes of less than \$6,000 a year, revealing what was regarded as a new trend in air travel. The committee made the following summation of its report: "The readjustment of general rate levels continues without abatement. Competition between and within the various transportation agencies is still keen and is expected to become more severe. There is nothing to indicate that there will be any slackening in the volume or time required in hearing and determining cases; on the contrary, an increase might well be expected."

The committee on legislation, of which H. L. Hooker of Virginia was chairman, presented its report in the form of a 40-page printed booklet, listing legislation in Congress of direct application to transportation or utilities companies.

A resolution was introduced on behalf of the Washington state regulatory authorities urging that the general solicitor of the association follow closely the

developments in the leasing of motor trucks. It was pointed out that an investigation of the I.C.C. Bureau of Motor Carriers had revealed serious irregularities in such leasing tending to break down existing motor carrier rates. This resolution was carried unanimously.

Rate Regulation

W. F. Whitney of Wisconsin served as discussion leader on transportation rates in a forum held on public utility rates in general. He listed the outstanding rate trends as follows: tremendous increases in transportation rates; the leveling of rates as between territories; the greater rate increases on small shipments as opposed to large shipments; the greater rate increases on short hauls, as opposed to long hauls; and the leveling up of rates as between different classification ratings. He stated that cost analysis has been used very little in recent general rate increase proceedings, and that emphasis has been primarily on revenue needs. He predicts, however, that despite an alleged reluctance on the part of the carriers to use cost analysis and a tendency to belittle its value for rate purposes, it will be of growing importance in rate determinations.

"The procedure today is quite different than in the earlier days of regulation," he said. "The old method was the application of qualitative analysis. We did take into consideration factors such as density of traffic, ton loading per car and other traffic characteristics that have a bearing on the cost of service, but we did not assign definite dollar-and-cents values to them. The present method is the application of quantitative analysis and we endeavor to work out dollar-and-cents values for each of the characteristics which have a bearing on the costs; but the ultimate in cost analysis has not yet been attained, because the working data and the technique of handling such data are constantly being improved and because proper methods of treating important elements of the total cost, such as constant costs, are by no means decided."

The report of the committee on rates of transportation agencies, of which Agnes Wilson of Missouri was chairman, listed important rate cases since the last meeting of the association and outlined their disposition by the rate-making agencies. The committee made the following recommendations: "We believe that a committee for the study of simplification of rate publication would be desirable. The tariffs naming transportation rates are, in general, very complicated. There are so many rate territorial divisions and exceptions pertaining to commodities and territories as well as classifications, with constant changes by supplements, that it is most difficult to keep abreast of the many changes. It would be beneficial if the rate men of the various state commissions could be organized as a unit under the main association for the purpose of working together and holding conferences with respect to rates that involve more than one state."

The Uniform Classification

A forum was held dealing with the uniform classification problem. J. H. Alldredge, Interstate Commerce commissioner, described in detail the history of the attempts to bring about a unified classification of freight,

stating that such an accomplishment was dictated by practical necessity as well as by economic considerations and that uniform classification of freight is an essential element of sound rate-making policies. According to the commissioner, there were once 138 different freight classifications in force in trunk-line territory alone and one railway had nine separate classifications for freight originating on its line.

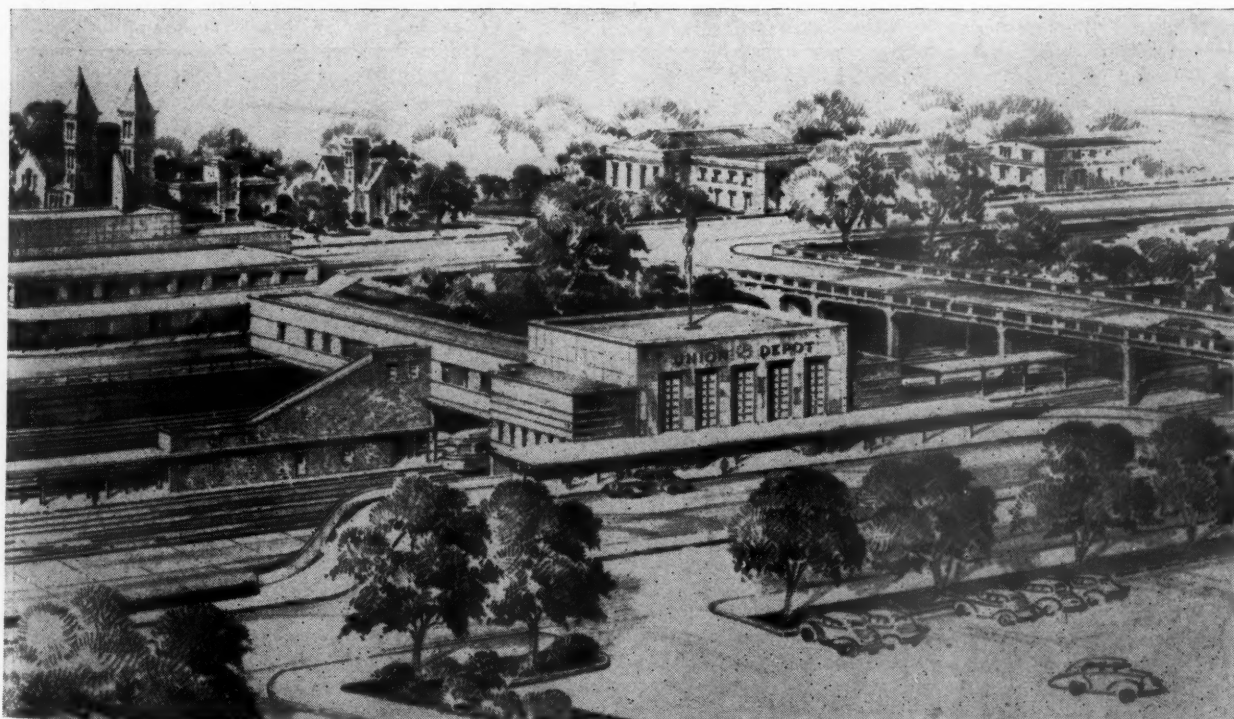
Recommended in First I. C. C. Report

The commissioner traced the constant efforts of the commission toward unification, pointing out that its first annual report (1887) contained strong recommendations along these lines and that repeated mention has been made of this subject in succeeding annual reports. The first consolidated classification, incorporating the former western, southern and official classifications, was made effective December 30, 1919, when one volume was published containing all three classifications. According to Mr. Alldredge, a complete unification and merger of the southern and western classifications was then possible, but the official classification could not be consolidated with them until a closer alinement was effected in the basic rate structures. By October, 1948, however, the Uniform Classification Committee had completed, in tentative form, revising and unifying all the ratings in the several classifications and, after hearings which will end next April, the committee will begin the final compilation of a new

uniform classification; which is expected to bring about, finally, the result which has been striven for for 50 years.

B. M. Gray, of Kansas, was by no means as optimistic as Commissioner Alldredge. He asserted that, before all the dockets of the classification committee have been prepared and hearings held, at least five years will elapse. "And even then," his report continues: "What will we have? A proposed classification that will be of no use to anyone and which will confuse and confound rather than clarify the situation. The classification now being indolently prepared is so far from reality that it cannot even afford a basis for hearings. Rather than adversely affecting as few shippers as possible, the classification committee proposes to affect adversely virtually all shippers. . . . The failure of the carriers to carry out their promise to the I.C.C. cannot be too strongly condemned."

W. H. Gorman, of California, repeated Mr. Gray's sentiments in somewhat less caustic tones and accused the carriers of using the classification revision as a revenue-producing device. "If the uniform classification is to be made for the railroads alone," he said in his report, "we shall do little or nothing to effect actual uniformity. . . . Little good will result from uniform ratings by rail carriers while different ratings prevail for the carriers who are really handling the major volume of L.C.L. traffic. Why not make the truck lines parties to this proceeding and bring in the carriers actually transporting most of the L.C.L. traffic?"

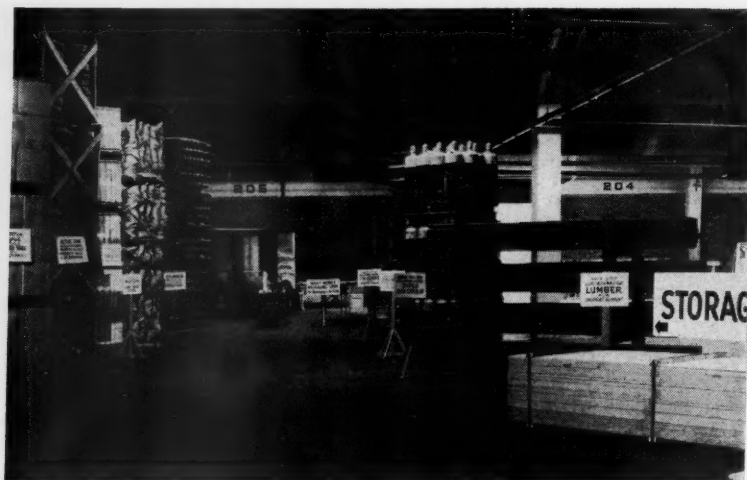


NEW STATION FOR RUBBER CITY—An artist's conception of the new station of the Akron Union Passenger Depot Company, at Akron, Ohio, construction of which was started recently. To cost an estimated \$1,300,000, the new station will be used by trains of the Baltimore & Ohio and the Pennsylvania. The structure will be of steel-frame and concrete, faced with limestone and brick, and will be equipped with radiant heat, supplied through pipes embedded in the floor. It is scheduled for completion early in 1950



Left—Why the Navy recommends the 48- x 40-in. pallet as standard. Mock-ups of boxcar and truck show that the 48- x 40-in. pallet goes well with both types of transportation, while the 48- x 48-in. size leaves waste space in truck body

Below—Storage methods in use in Naval warehouses



NAVY URGES UNIT LOAD SHIPPING

Photos on this page courtesy U. S. Navy

Navy Industrial Association members told changes in box car design will help in handling loads speedily



Mock-up of boxcar used in time trials on various door widths. Door is adjustable to 6-, 7-, and 8-ft. widths

At a materials handling and packaging conference held at Bayonne, N. J., September 28, the Navy Department and the Navy Industrial Association (N.I.A.), joined in urging upon the railroads changes in freight car design which would facilitate the mechanical handling of unit loads of freight. The major change asked for was the incorporation of the 8-ft. wide box car door in cars built in the future. Also suggested were standard and wider refrigerator car doors of the sliding type.

Top "brass" of the Navy, including Admiral Denfeld, Chief of Naval Operations, and Admiral Foster, head of the Navy's Bureau of Supplies and Accounts, were on hand and urged upon all present the value of shipping in unit loads. Mechanical handling of unit loads in loading and unloading operations is an important saver of manpower, and during a national emergency efficient use of manpower will be of the utmost importance both to the military services and to industry, Admiral Foster said. Admiral Denfeld said that the attendance of so many industrial people demonstrated "both recognition and appreciation of the necessity for proper preparation and handling of supplies so that they will reach their ultimate destinations, anywhere in the world, in good condition and ready for immediate use."

Test of Door Widths

After the remarks mentioned above, personnel of the Naval Supply Corps School demonstrated that an 8-ft. door for box cars would help mightily in cutting the amount of man-hours required in carloading. In a series of tests they showed that the 8-ft. door made mechanical loading of unit loads into box cars more than twice as fast as was possible if the car door were only 6 ft. wide, while the 7-ft. door was only 18 per cent more efficient than the 6-ft. door. Thus:

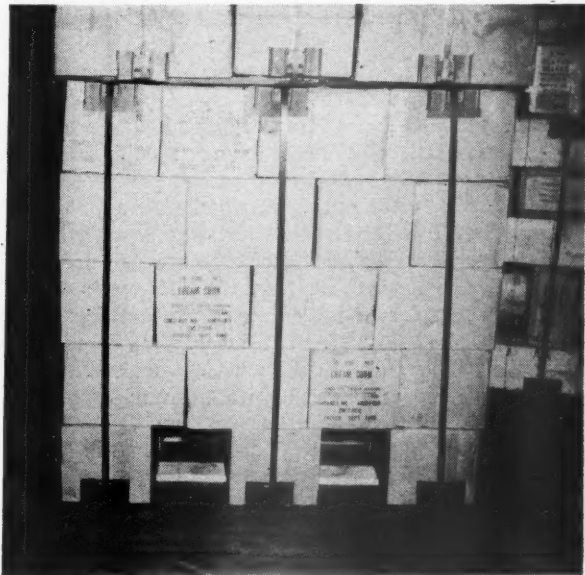
Door width	Average Handling time per unit load	Comparative efficiency
8 ft.	42 sec.	1.00
7 ft.	63 sec.	.66
6 ft.	86 sec.	.48

It is not expected that all cars now in use will have doorways changed from 6 ft. to 8 ft., the Navy said, for "the expense involved . . . precludes such action. However, it may be possible to standardize on an 8-ft. door on subsequent construction. This step is deemed of the utmost importance because box cars presently under construction will be in service for the next 30 or 40 years and because mechanical handling, now in its infancy, seems destined for tremendous expansion." Many members of the N.I.A. are supporting this proposal, including some who are members of the railroad supply fraternity and at least one carbuilder.

Present refrigerator car design came in for criticism for those features which make mechanical handling difficult or impossible. Car doors are not wide enough to permit the entry of a 48- x 48-in. pallet; floor racks are of insufficient strength to support power-operated equipment while the spacing of the deck boards prevents the use of standard hand-operated equipment.

On the Navy Industrial Association's material

handling advisory committee are two railroad men, W. R. Elsey, assistant vice-president, purchases, stores and insurance, Pennsylvania, and C. G. Peterson, chief engineer, Railway Express Agency. E. J. Dahill, chief engineer, freight loading and container section, Association of American Railroads, is a member of the packaging advisory committee.



Unit load without pallet. Steel strapping and two pieces of lumber are required



Tests of strength, unit cost, ease of replacement of component parts, etc., have demonstrated this hardwood pallet best all around. All tests are to be re-run

N.I.T. LEAGUE

TAKES "SHOW ME" POSITION ON HIGHER FREIGHT RATES

Substantial" general rate increases by the railroads, accompanied by corresponding increases in the rates of other agencies of transportation, have been one of the greatest factors contributing to the higher cost of living in this country, according to a report of the National Industrial Traffic League's special committee on transportation outlook and policy.

The report, submitted during the league's 41st annual meeting in the Hotel Pennsylvania, New York, on November 18 and 19, said "the increases have met with growing resistance from shippers and yet have been largely recognized as required by the higher wages and costs of materials The opinion is quite general that this upward trend must stop somewhere and the league, in considering its position toward the pending Ex Parte 168 increases, has this dilemma: On the one hand, league policy has been and is that the railroads and other transportation agencies should be well nourished and have adequate revenue not only for meeting operating expenses, but to yield a fair rate of return on investment. On the other hand, continuing rate increases cannot be the answer to the revenue needs of the carriers, not only because of the economic effect on the country but especially because so much of the increased revenue expected to be realized from increased rates is lost because of traffic changes or diversions, or payments of increased taxes to the government. Out of every dollar of anticipated increased revenue the railroads probably realize only 50 cents."

The league, through its counsel and a special committee, will actively participate in all Ex Parte 168 proceedings before the Interstate Commerce Commission. The special committee, in a report approved by the meeting, recommended that the league challenge by cross examination and, if deemed feasible, by general rebuttal evidence, the carriers' claims as to probable revenue deficiencies for the purpose of requiring full proof on which the I.C.C. can determine "the extent of any true need for further net revenues." The committee also recommended that the league urge that rates are reaching the saturation point and that "further increases produce comparatively small increases in net revenues, except temporarily, and that emphasis should be shifted from rate advances to proper economies, efficiencies and cost reduction."

Rate of Return

If it appears, the committee further recommended, on all the evidence received in Ex Parte 168 that the carriers in the country as a whole are or will be in need of additional revenues, the league will not oppose the granting of general increases in any form the commission may determine to be necessary and appropriate. In addition, the league will take no position,

**Recognizing railroads' need of
greater revenues, shippers
group insists rate advances
"must stop somewhere"**

for or against the carriers, as to what is "a normal, fair rate of return, but insists that such rate shall be applied to the valuation for the purposes determined by the commission and not to the higher valuations set forth in the railroad petitions."

Four recommendations on palletization, submitted by a special committee headed by William H. Ott, Jr., general traffic manager of Kraft Foods Company, were approved by the meeting. The recommendations were (1) that special rate treatment should be given to transportation charges on pallets when moving under load and when moving empty for return, whether as a part of any pooling arrangement or as an industry-furnished transportation facility; (2) that special rate treatment should be given transportation charges on l.c.l. freight, with the purpose of encouraging the door-to-door movement of l.c.l. freight on pallets; (3) that the establishment of a carrier- or carrier agency-owned and operated pallet pool appears desirable and the league should offer all possible encouragement and assistance to that end; and (4) that further study of the subject and furtherance of these recommendations be referred to a league committee. A four-man committee, headed by Mr. Ott, was appointed to carry out the fourth recommendation.

Pallets an Essential Facility

Pallets as a principal facility of transportation have been given considerable attention during the past year and are achieving a more prominent place in transportation thinking as time goes on, the transportation instrumentalities and car service committee reported. The committee, the chairman of which is Hugo Ignatius of International Paper Company, feels that the carriers may well give "serious thought to making a definite contribution to a greater use of the pallet as an essential transportation facility, if for no other reason than its value in improving transportation by speeding up the loading and unloading of cars and increasing the safe carriage of articles of commerce, thereby materially assisting in the reduction of the carriers' heavy loss and damage claims."

An earlier section of this committee's report recommended that the railroads give more careful thought

to the style and size of new cars to meet the impending needs of industry. "There seems to be some tendency towards bigger car units," the report added, "possibly encouraged by the expectancy of making the principles of O.D.T. 18-A loading a permanent fixture in transportation. This is . . . an effort to make industry pattern its practices to the form of transportation supply It may be extremely likely that smaller car units with more cars per train will afford the rail carriers more effective sales arguments than the larger car units."

Although the production goal of 10,000 new freight cars a month has been attained three times this year, the carriers and carbuilders must not feel they have "arrived," the report went on. Actually, even the minimum goal was not achieved, because transportation needs require the full 10,000 cars each month. The number of old cars being currently retired demands a strict adherence to the carbuilding schedule. Railroads should not let their enthusiasm for passenger traffic cause the slightest interruption in the building of new freight cars.

Many Cars in Poor Condition

The adequacy of car supply, the report also said, should be gaged under normal peacetime practices. "O.D.T. Order 18-A is a carry-over from our turbulent war period and has been carried forward with the support of shipper groups. However, this kindness should not be taken for softness and we feel that our league should take the stand that an adequate car supply must meet normal transportation needs without the benefit of O.D.T. Order 18-A." In addition, the committee reported, an "inordinate number" of the cars in service and placed by the carriers for loading are not in physical condition to carry the lading safely. Many shippers were said to have reported that the placing of poorly conditioned cars is one of the chief contributions to car delays because of the necessity of replacing such cars before loading. Delays at congested terminals, the principal cause of which is thought to be inadequate motive power, also were cited as a prime factor in car delays.

It was the sentiment of the league, expressed in the form of voted approval of an executive committee statement, that O.D.T. Orders 1 and 18-A be allowed to die with the death of the O.D.T. and, further, that the league should oppose the restitution of the orders by the I.C.C. Approval also was obtained for another executive committee recommendation that the sentiment of the league be that the railroads augment their car supply, "at the going cost of construction," to meet the need "of our growing economy."

Leo M. Cherne, executive secretary of the Research Institute of America, was the guest speaker at the league's annual luncheon on November 18. In his address Mr. Cherne discussed the implications and effects of the recent national elections on the business world. George Paul, president of the Canadian Industrial Traffic League, the officers of which attended the two-day annual meeting, and representatives of railroads, manufacturing concerns and banks, were among the guests at the luncheon.

A proposal by the executive committee that the N.I.T.L. dues be increased received the necessary

approval of at least two-thirds of the members present at the meeting. The maximum annual dues were increased to \$125 from \$100. Members paying annual dues of \$100 or more are entitled to an unlimited number of additional memberships, with annual dues of \$30 each, instead of the former \$25. Those paying annual dues less than \$100 may have additional memberships at annual dues of \$40 each, instead of the previous \$35.

Officers Re-elected

A. H. Schwietert, traffic director of the Chicago Association of Commerce and Industry, was re-elected president of the league for the coming year. I. F. Lyons, traffic director of the California Packing Corporation, and Roy W. Campbell, manager, traffic department, of the Butler Paper Corporations, were re-elected, respectively, vice-president and treasurer. C. H. Beard, general traffic manager of the Union Carbide & Carbon Corp., was elected chairman of the league's executive committee to succeed Porter L. Howard, general traffic manager of the Sun Oil Company.

W. E. Fowler, general traffic manager of the Youngstown Sheet & Tube Co., E. L. Hart, secretary of the Atlanta (Ga.) Freight Bureau, and E. B. Smith, director of traffic of General Mills, Inc., were elected regional vice-presidents for, respectively, the Central Freight Association region, the Southeastern region and the Northwestern region. Elected to honorary life memberships in the league were Albert W. Stebbings, retired traffic manager of the Thatcher Glass & Manufacturing Co., and George E. Griffith, who recently retired as traffic manager of the Carborundum Company.

J. W. Harley, chairman of the membership committee, said the net gain in the league's membership during the past year was 59, which increased the total membership to 1,429 on November 1. It was announced that the 1949 annual meeting will be held on November 17 and 18 in the Palmer House, Chicago. The league's executive committee will hold sessions there on each of the two preceding days.

"If Trains Are Delayed"

Through an illustrated pamphlet, "If Trains Are Delayed," now being mailed to their homes, Pennsylvania employees will be briefed in the job of getting quick information to passengers on delayed trains and to those waiting in stations as to the cause and probable length of delays.

The pamphlet, which augments instructions of long standing, points out that while it is the first duty of train crews, if a delay occurs, to help get the wheels rolling again, their next responsibility is to end passengers' uncertainties by telling them as soon as information is received what is wrong and how long the delay is likely to be, with such other help as may be desirable.

In text and cartoon the pamphlet outlines to trainmen, station and other employees specific situations involving delayed trains and indicates the announcements which should be made to passengers in each situation. It also suggests other ways of minimizing inconvenience to travelers.

GENERAL NEWS

Begin I.C.C. Hearings On Space Handling

Witnesses blame room shortage for complaints; deny "black market"

A special investigator of the Interstate Commerce Commission and officers representing 26 railroads testified at Chicago on November 18 and 19 that there is very little evidence of a so-called "black market" in the handling of Pullman space in that city. The testimony was heard at the first of four regional I.C.C. hearings in connection with the commission's investigation of railroad and Pullman Company rules and practices governing the reservation, sale and redemption of sleeping car, parlor car and reserved-seat coach tickets (see *Railway Age* of October 16, page 81).

Commissioner Richard F. Mitchell and Examiner F. E. Mullen were told by Earl B. Padrick, chairman of the Trans-Continental and Western Passenger Associations, that "no fundamental changes are necessary in present practices with respect to reservations and sale of sleeping car, parlor car and reserved-seat coach space tickets." Justin J. Nolan, assistant passenger traffic manager of the Pullman Company, testified that "it would not be desirable at this time to make any change in the Pullman refund tariff," adding that any change in the regulations for nationwide application "should be towards making them more liberal rather than more restrictive." In all, seven railroad representatives testified concerning, among other things, rules governing the acceptance of gratuities in connection with the sale or reservation of passenger space; handling of diagrams; block reservations; the installation of passenger equipment; and arrangements with travel agencies or hotels with respect to passenger accommodations.

No individual appeared at the hearing to register a complaint, although Commissioner Mitchell announced several times that anyone could offer evidence, with or without an attorney.

"Very Little Evidence"

Arthur E. Knowles, special agent, Bureau of Inquiry, I.C.C., who testified on November 18, said that he spent 26 days in Chicago during March and April, 1948, and investigated the reservation practices of eight large lines headquartered there. He stated that he found "very little evidence" of black

market activity, pointing out that the city of Chicago has an ordinance which prohibits a charge of more than \$1 by any person for procuring railroad accommodations for another. The Pullman tariff governing the cancellation of Pullman tickets, he said, also provides that tickets purchased for resale will not be redeemed.

Further on this subject, he declared: "Reservation lists were maintained by the different roads. However, they were not honored strictly in the order the requests were received. On one railroad I found the waiting lists divided into two parts — one part for names of preferred patrons whose requests were received through the carriers' traffic departments and the other for requests received direct from the general public."

Mr. Knowles told of examining the "black market" files in the office of Hugh W. Siddall, late chairman of the Trans-Continental and Western Passenger Associations, which organizations are charged with the duty of investigating such complaints on behalf of the railroads. Only three instances, he said, were found "where individual investigations disclosed that employees of railroad-operated hotel ticket offices did accept premiums in return for getting Pullman accommodations."

In this connection, the witness said: "One instance involved Floyd Healey, a staff writer on the San Francisco Chronicle, who paid a premium of \$10 to a ticket seller at the Merchandise Mart for space on Chicago & North Western train No. 27 on January 25, 1947. Investigation disclosed that the space had been obtained for Healey through Petry & Co. (an advertising agency) and the city passenger agent for the Union Pacific at Chicago, and that the Petry Company representative had suggested that the ticket seller be given a reward for his service in the matter. The investigation developed that the ticket seller at first declined to accept Healey's 'tip' of \$20, saying that he was only performing his duty but that Healey was most insistent, and finally the ticket seller agreed to accept \$10. After his trip, Healey wrote an article for the San Francisco Chronicle based on his Chicago experience, which appeared in its issue of February 3, 1947. The article was entitled 'Pullman Reservation Racket is Still Pinning Down U. S. Travelers.'"

The so-called Healey case was discussed by several subsequent railroad witnesses as a result of questions asked by Commissioner Mitchell. The latter labeled railroad evidence in the case as

"hearsay" and suggested that the railroads investigate the circumstances more thoroughly. He was of the opinion that Mr. Healey and the ticket seller involved should be contacted, and that the railroads should determine whether the newspaper writer had to pay \$10 for his accommodations. The commissioner expressed the hope that some "real" evidence would be presented at the hearing to be held at Los Angeles, Cal., next February.

Mr. Knowles also testified as to the shortage of railroad passenger car equipment, particularly room-cars. "I listened to hundreds of calls in different reservation bureaus where offers of section space were turned down. The demand was for room space," he declared.

Withholding Space

At another point in his prepared statement, the I.C.C. special agent stated: "I found that the railroads regu-

WIPRUD WOULD REPEAL BULWINKLE-REED ACT

Repeal of the Bulwinkle-Reed Act was advocated by Arne C. Wiprud, former assistant attorney general in charge of the Department of Justice's Anti-Trust Division, in a recent presentation before the so-called Small Business Committee of the House of Representatives. The act was passed by Congress last June over President Truman's veto, and is now section 5a of the Interstate Commerce Act; it grants carriers immunity from the anti-trust laws in connection with joint agreements relating to rates, charges, classifications, and divisions, if such agreements are approved by the Interstate Commerce Commission.

Mr. Wiprud's presentation of 60 mimeographed sheets was a reiteration of various allegations which have been made from time to time against railroad rate-making procedures and other joint-action arrangements, including the allegations which form the basis of the Department of Justice's pending anti-trust complaint against the Association of American Railroads, and the western roads. His argument for repeal of the Bulwinkle-Reed Act was summarized as follows: "This is vital because the anti-trust laws afford the protection sorely needed by owners and managers of private companies in all fields of public transportation, and by the public, against future attempts at banker domination and exploitation and the establishment of cartel-monopolies."

larly withheld space from sale to the general public and allotted such space either directly to certain commercial accounts for anticipated use or to various officials of the passenger and freight traffic departments to protect anticipated requests from preferred or influential persons or firms. Some of the roads engage in this practice openly, while others resort to hidden entries in the diagrams to conceal the practice."

In this connection, Mr. Padrick testified that 10 of the 26 railroads involved in the Chicago hearing withhold space from the general public sleeping car diagrams. Such space, he said, is considered "protective space," to cover errors in assignment, transfer of passengers where it is found necessary to operate a substitute car, for general emergency requests involving movement of the sick, hospital cases, government officials and last-minute necessary business travel. Such withheld space, however, is held to a minimum, said Mr. Padrick.

At another point, Mr. Padrick said that there is a difference of views among the carriers as to what the commission means by "block reservations." Some carriers make block reservations for the military, for tourist agencies for all-expense tour traffic and for commercial concerns with a regular flow of traffic between specific points.

Responding to specific questions asked by the I.C.C. in advance of the hearing, Mr. Padrick testified that four of the railroads participating in the Chicago hearing have issued written instructions prohibiting acceptance of gratuities and 10 have issued oral instructions. The remaining carriers, said the witness, reported that they had not been confronted with difficulties with respect to gratuities and did not feel it was necessary to issue instructions.

The witness said that differing practices on individual railroads are in the public interest, based on varying conditions in different parts of the country and at different times of the year. "Certainly the railroads desire to do everything in their power to fill their trains to capacity and not have vacant space on any of them. It is a fact that one of the most 'perishable commodities' for sale is space on trains."

Rooms in Heavy Demand

The increasing demand by passengers for room accommodations was explained by Mr. Nolan, who pointed out that of the 1,299 lightweight sleeping cars ordered since the war sections comprise 0.88 per cent of the space units and rooms 99.12 per cent. As of November 10, 1948, only 299 of these cars had been completed and placed in service, he said.

The Pullman officer asserted, however, that "there are very few days even during periods of peak traffic, where a passenger desiring sleeping car accommodations cannot be accommodated in some type of sleeping space to his destination via the railroad of his choice."



VAPOR HEATING HONORS 25-YEAR EMPLOYEES.—Forty-seven long-time employees of the Vapor Heating Corporation—whose combined service totals 1,457 years—were honored at a dinner given by the firm at Chicago on November 11. In appreciation of their services, A. D. Bruce, president, presented each man with an engraved watch. The chief topic of conversation at the dinner was how the company has grown with the railroads, from a small outfit with few employees to its present size with nearly 700 persons on its payroll. Mr. Bruce, who has 39 years of service with the firm, spoke briefly of the opening of the firm's thermostat tube department, which incorporates new methods of manufacturing developed by the research department. Some of the men with over 25 years of service who attended the dinner were (front row, left to right): L. H. Gillick, vice-president and general sales manager; E. E. Smith, retired from the sales department; E. A. Russell, vice-president of engineering research; Mr. Bruce; B. A. Keeler, employed in sales and service at Vapor's Cleveland, Ohio, office, and C. J. Scanlon, sales department, Chicago; (back row, left to right): V. T. Borst, assistant secretary; L. B. Rhodes, sales, Washington, D. C., office; W. M. Smith, contact engineer; O. A. Rosboro, vice-president and secretary, handling foreign sales; J. Van Vulpen, assistant chief engineer; T. H. Manchester, mechanical engineer; E. C. Post, sales department, retired, and F. Rutherford, mechanical assistant to vice-president

It may be necessary for him to accept a second or third choice as to the type of accommodation, or as to a preferred train to his destination."

Testifying as to the handling of space reservations on their respective railroads were: Albert Cotsworth, Jr., passenger traffic manager, Burlington Lines; C. E. Quackenbush, assistant general passenger agent, Chicago & North Western; D. L. Eckman, assistant general passenger agent, Chicago, Rock Island & Pacific; D. L. Hearne, general passenger agent, Illinois Central; and T. D. Moss, assistant passenger traffic manager, Missouri Pacific Lines. The next hearing on the matter is to be held on December 20 at New York, with subsequent sessions on January 24, 1949, at Miami, Fla., and on February 28, 1949, at Los Angeles, Cal.

Doesn't Expect Cement Ruling to Be Relocator

Fletcher predicts that "great disturbance" won't come

R. V. Fletcher, special counsel and former president of the Association of American Railroads, does not think there is going to be "this great disturbance and relocation of industry that so many fear" as a result of the Supreme Court's April 26 decision upholding the Federal Trade Commission's "cease and desist" order against the cement industry's basing-point system of pricing. He expressed this view last

week while participating in a discussion of the matter with the class of the Institute of Industrial Transportation and Traffic Management at American University, Washington, D.C. Judge Fletcher is chairman of the university's board of trustees.

The discussion took place at a November 17 meeting, and was preceded by an address, "Transportation Conditions in the United States," by Interstate Commerce Commissioner Walter M. W. Splawn. Commissioner Splawn did not refer to the court's decision in his address, but his participation in the discussion pointed up his view that interested parties should adopt a "wait-and-see" attitude. He suggested that when the present investigation of the Senate's Trade Policies Committee is completed, there should be more reliable evidence as to whether the F.T.C. policy is a "disturbance" or "just one of those incidents in our economic growth which come from time to time, and about which emotional views are expressed."

Judge Fletcher said he was not sure that the court's decision has been "analyzed and thoroughly understood." The court, he added, "has done no more than hold that there must be no conspiracy or agreement on a basis of prices." He expects that "some way or other, either by action of Congress or change in Federal Trade Commission policy," there will be maintenance of competition in markets. He entertains such expectations because "it would be astonishing under our free system" if, for example, a Hartford, Conn., producer could not compete in the South Bend, Ind., market.

"I do not think," Judge Fletcher continued, "that the courts are ever

PRESIDENTS' NIGHT AT NEW YORK R. R. CLUB

Something rather novel in the way of railroad meetings was staged by the New York Railroad Club at a "Railroad Presidents' Night" on November 18. The chief executives who spoke were Charles E. Denney (Northern Pacific), Fred G. Gurley (Santa Fe), Cedric A. Major (Lehigh Valley), and Laurence F. Whittemore (New Haven). In their brief speeches, the speakers touched upon the subjects uppermost in their minds at the time—an atmosphere of easy informality having first been established by Vice-President Charles E. Smith of the New Haven, who did the introducing in his characteristically uninhibited way.

For example, in calling upon Mr. Gurley, he emphasized the position of the Santa Fe as "The World's Number 1 Railroad," as it was recently designated by "Fortune" magazine, and referred to the road's president as "Chief Heap Wampum."

Mr. Gurley observed that railroad people always had problems; and, if they did not, there would not be any jobs for them. He believes that, on the whole, the railroads are in as good shape as they ever were, but they need more steel and more cars. They need to be alert to keep themselves constantly modern and they should expand their public relations efforts.

As an example under this heading, he told of the recent amendment of California's excess crew law, which required as many as seven brakemen on a freight train. Effort to secure amendment of this act from the legislature was unsuccessful, so the battle was carried to the people under the state's "initiative and referendum" provisions. The success of this effort, in Mr. Gurley's opinion, demonstrates that the railroads can secure the solution of their problems which require political action, if they evidence the necessary courage and vigor.

In his remarks, Mr. Denney dwelt upon the tremendous industrial development of the northwest and the continuing progress of its agriculture. He drew attention, likewise, to the need of the railroads for revenues adequate to provide new rail and equipment, and called attention to the greatly increased cost of these items.

Mr. Major gave a hopeful report on the speed and simplicity with which railroad reorganizations may be accomplished under

the Mahaffie Act, which became a law on April 9. The L. V. filed under this act on July 8 and got its proposed report on October 25. Oral argument will take place on November 29 and he hopes action, one way or the other, may be complete by April 1.

Mr. Major expressed the belief that the figure of net railway operating income is misleading to many people, who do not understand that interest and rents must be deducted from it before any return is left for equity holders. He believes, also, that current earnings, despite their improvement over 1947, are misleading, because of the high cost of replacements.

Mr. Whittemore expressed the opinion that the country needs a "new Transportation Act" which will restore to the railroads some of the freedom which was taken from them on the theory that they enjoyed monopoly, which has now disappeared. He does not believe that the competitors of the railroads are ever going to be subjected to the minute and detailed control which burdens the railroads—hence the only solution for the railroads' situation is to give them more freedom, e.g., to meet a situation wherein the railroads are left with the unattractive business (baby carriages and lamp shades), and providing standby facilities, while their competitors pull away with the remunerative tonnage.

This situation cannot be met by putting regulatory restrictions on the railroads' competitors because, even when such restrictions are applied (e.g., weight limitations on trucks), they are not obeyed. Railroad men, the New Haven president fears, may be so used to their chains that they have even grown to like them, and to fear their removal. There is nothing, he concluded, in the railroads' situation which cannot be cured by forthright thinking—and courageous action in the direction which such thinking indicates.

Perry M. Shoemaker (vice-president, operations, D.L.&W.), second vice-president of the club, presided at the meeting and reviewed briefly the educational facilities which the New York Railroad Club offers to the railway industry. He reminded the audience, also, of the Roy V. Wright Memorial Essay Contest which the club is conducting and in which entries will close on February 1.

In his address, the commissioner gave a highlight review of current transport conditions, noting, among other things, the large volume of traffic, shortages of equipment, and the disposition of carriers on the inland waterways and truckers to shy away from the small-package business. Of carriers on the inland waterways, he said: "They have become specialists in transporting commodities in bulk—raw materials and certain processed goods—from dock to dock. They are apparently participating less and less in movements on joint rates where they have to pay or re-

ceive divisions. They seem more and more to be giving up packages and small shipments."

Of the truckers' attitude toward small-package business, Commissioner Splawn had this to say: "If we look to the highways we might expect these small packages which were given up by the waterways to appear, more and more on the trucks. If so, it is not on the trucks of common carriers. The common carriers by highway have found the cost of pick-up and delivery of handling less-than-truckload shipments so great that they have again and again embargoed them or subjected their movement to very high rates. That is, the regulated carriers by trucks also appear to be specializing and handling more and more the commodities which move in truckload and which move from the shipper's platform to the receiver's platform."

The university's president, Dr. Paul F. Douglass, introduced Mr. Splawn, recalling that the commissioner was formerly dean of the university's Graduate School. Dr. L. M. Homberger, professor of transportation at the university, is director of the institute.

Western Roads Seek Approval of Rate Pact

I.C.C. gets first railroad application under Bulwinkle Act

Carrier members of a newly organized Western Traffic Association have filed with the Interstate Commerce Commission the first railroad application for approval of a rate-procedures agreement under provisions of the Interstate Commerce Act's section 5a, the new section added by the Bulwinkle-Reed Act which Congress passed last June over President Truman's veto. The section grants carriers immunity from the anti-trust laws in connection with joint agreements if such agreements are approved by the commission and relate to "rates, fares, classifications, divisions (including charges between carriers and compensation paid or received for the use of facilities and equipment), or rules and regulations pertaining thereto, or procedures for the joint consideration, initiation or establishment thereof."

The application is No. 2 in the commission's section 5a docket, the first filing having been that on behalf of motor carriers which are members of the Household Goods Carriers' Bureau. The section contemplates that the applications will be filed by carriers, there being no provision for association applications. Thus all members of the Western Traffic Association (113 railroads and the Pullman Company at the time of the filing) are parties to Application No. 2.

It was filed on their behalf by W. H.

going to hold that uniform prices fixed to meet competition are wrong. Under f.o.b. mill pricing, there would be no competition in primary markets. Even if the courts sustain such a requirement, Congress will correct it."

"Wait and See"

When Judge Fletcher had concluded, Commissioner Splawn reiterated his advice to "wait and see." He said: "We haven't got to the place yet where we can say that a particular class of carriers are going to be hurt by any large relocation of industry."

Dana as attorney-in-fact for each of them; and it was also executed individually by the Chicago, Burlington & Quincy "in its own stead as well as by the aforesaid W. H. Dana as its attorney-in-fact." Mr. Dana has been chairman of the Western Traffic Executive Committee, which would be succeeded by the new Western Traffic Association's executive committee; or as the application put it, the latter "would perform a function similar to that formerly performed by the Western Traffic Executive Committee."

The application consists of an explanation of the proposed set-up and supporting exhibits, including copies of the agreement among the association's member carriers and of the association's articles of organization and procedure. "The agreement," as the application described it generally, "pertains to an organization which would continue in the Western District, in substantially the same form and under approximately the same names, the various railroad rate organizations and procedures which have functioned for many years." A single agreement covering the entire western group of rate associations was decided upon "because of the inter-related structure of railroad rates with which such organizations deal, and because of the relationship between the several organizations."

Includes Existing Organizations

Thus, the Western Traffic Association would embrace six regional freight organizations and three passenger organizations. The freight organizations would be the Trans-Continental Freight Bureau, the Western Trunk Line Committee, the Southwestern Freight Bureau, the Texas-Louisiana Freight Bureau, the Pacific Southcoast Freight Bureau (formerly functioning as the Pacific Freight Tariff Bureau), and the North Pacific Coast Freight Bureau. The passenger organizations would be the Trans-Continental Passenger Association, the Western Passenger Association, and the Southwestern Passenger Association.

Provision is made for subdivisions within the regional freight organizations, including arrangements whereby the Montana Lines Committee would function as a subdivision of the Trans-Continental Freight Bureau; and the Western Trunk Line Committee would have as subdivisions the Minnesota Lines Committee, the Northern Lines Committee, the Colorado-Wyoming Committee (formerly Colorado Lines Committee), the Colorado-Utah Committee, and the Intermountain Committee (formerly the Local Utah Committee).

"The agreement is so arranged," the application said, "that the several rate organizations could continue to function in the various areas in which they are recognized by tradition. Matters which are primarily of local concern within a given rate territory could be handled to completion by the regional rate organization functioning therein. As to

F.T.C. PRICING POLICIES MAY FAVOR PRIVATE CARRIERS

"On November 18, 1948, the senior associate general counsel for the [Federal Trade] commission . . . testified . . . that a seller who owns a fleet of trucks may legally consider transportation costs in those trucks as a cost of his doing business and is not required to charge the transportation cost to his customers. But a competitor, across the street if you please, and making the precisely same article, shipping into the same areas, through trucks of a common carrier, is required to charge the customer the full freight."

"Thus, a seller's ability to compete in distant markets may well depend on whether he is financially able to purchase his own fleet of trucks."

— Excerpt from an address to the National Conference of Business Paper Editors, at Washington, D. C., on November 18 by William Simon, chief counsel, Senate Trade Policies Committee.

matters which involve two contiguous areas, the regional organizations in such areas could function jointly in arriving at final disposition. Matters which are of general concern in the Western District or which are district-wide in their scope, and matters which are not concluded through joint handling by two or more regional organizations, could be handled by the Executive Committee of the Western Traffic Association."

It is explained that the purpose of that executive committee is to deal "with matters which are of concern generally throughout the Western District, with those matters of general concern in two or more regions which are not disposed of by joint handling, and to provide for a uniform classification." Any Class I rail carrier, "not subject to the management or control of a member carrier," would be eligible to membership in the executive committee. Meanwhile "any carrier by railroad subject to the Interstate Commerce Act, however classified by the commission as to its annual revenues," would be eligible to membership in any one or more of the regional organizations, or subdivisions thereof, "having jurisdiction over traffic such railroad is engaged in handling." And each member of any regional organization or subdivision would be a member of the Western Traffic Association.

Independent Action Rights Protected

On the matter of protecting the individual carrier's right to take independent action, as required by section 5a, the application had this to say: "The agreement guarantees to each individual railroad the free and unrestrained right to initiate rates, fares and charges and to make changes therein at any time and to take any other action without regard to the association or any of its

procedures. However, for carriers electing to use them, the agreement establishes procedures substantially in accord with those which have been traditionally employed for that purpose."

In addition to proposals as to rates, fares and charges, the regional organizations would undertake to handle, collectively, divisions of revenues, compensation for the use of facilities and equipment, and "related matters," but "use of such procedures for such purposes would be entirely optional with members." The agreement also provides arrangements for handling interterritorial rate matters, the expectation there being that tie-in arrangements will be included in agreements to be filed by roads in the East and South. Other provisions would cover the joint handling of matters with carriers of other types. Agreements between carriers of different types are limited by the section to those "relating to transportation under joint rates or through routes."

Arguing for approval of the proposed agreement, the application cited the Interstate Commerce Act's declaration of national transportation policy, and reports of Congressional committees on the Bulwinkle-Reed Act. It asserted that "the relationships, processes and procedures prescribed by the agreement not only are in furtherance of the national transportation policy but are indispensable to its accomplishment."

"Rate Structure" Indispensable

"Congress, in enacting the Declaration of Policy, and again in section 5a," the application also said, "acted upon the premise that there exists in the United States and will continue to exist, not a large number of transportation agencies, each operating in a vacuum, but a 'national transportation system', of which the railroads constitute an important segment. By these enactments also, Congress recognized (implicitly in the Declaration of Policy and explicitly in section 5a) that a rate structure, rather than a multiplicity of rates independently conceived and established, is indispensable to the national economy in the interest of stability and of avoidance of discrimination against individuals, localities and carriers."

"By the enactment of section 5a, Congress . . . announced the inescapable conclusion that such a national transportation system cannot function so as adequately to meet the needs of commerce and of the national defense unless the components of the transportation system — the carriers — are authorized jointly to consider and take action in the matter of rates, fares and charges. The agreement and the related articles of organization and procedure prescribe in detail an orderly, workable code of group rate-making for the western railroads which in all respects is in compliance with the enabling legislation and with the Interstate Commerce Act as a whole."

The application also pointed out that

OCTOBER REVENUES 9.9 PER CENT ABOVE THOSE OF OCTOBER, 1947

From preliminary reports of 82 Class I railroads, representing 81.3 per cent of total operating revenues, the Association of American Railroads has estimated that the October gross amounted to \$709,715,993, an increase of 9.9 per cent above the \$645,556,079 reported for the same 1947 month. Estimated October freight revenues amounted to \$593,982,541, as compared with \$537,301,179, an increase of 10.5 per cent, while estimated passenger revenues totaled \$62,790,609, as compared with \$62,685,693, an increase of 0.2 per cent. The estimate for all other revenues was \$52,942,843, as compared with \$45,569,207, an increase of 16.2 per cent.

"one of the major rate organizations" covered by the application — the Trans-Continental Freight Bureau — was "the subject of thorough investigation" by the commission in the early 'Twenties. In the commission's report of February 3, 1923, the activities and methods of the bureau, the application said, "were found to be advantageous to shippers and carriers."

Hence, it is suggested, these 1923 findings "are entitled to substantial weight in the consideration and disposition of this application" — because the proposed agreement "would safeguard the interests of the public to an even greater degree" than do the organization and procedures of the Trans-Continental bureau.

The commission's notice, announcing receipt of the application, said that any interested person desiring a hearing on it should file a written request within 20 days from the date of the notice (November 16). "As provided in the General Rules of Practice of the commission," the notice added, "persons other than applicants should fairly disclose their interest, and the respective position they intend to take at the hearing Otherwise the commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing."

Probable Improvement in Box Car Supply Noted in Gass Report

With recent reports of box car shortages running less than half of those reported at the same time last year, a pattern following closely that of 1947 seems "evidently in prospect," it is reported by A. H. Gass, chairman of the Car Service Division of the Association of American Railroads, in his latest monthly analysis of the "National Transportation Situation." Should the trend continue to follow the same course, the box car situation will improve materially each succeeding week from now until the end of the year, Mr. Gass

states, adding, however, that such improvement is contingent upon maintenance of the same degree of efficiency in the handling of equipment that has prevailed.

The C.S.D. chairman notes that efforts to find cover for late maturing crops in the West and Central East have made those territories the most seriously short of box cars and that, generally speaking, the shortages have been confined locally to individual roads or in localized territorial sections. He adds, however, that all railroads will be plagued with box car shortages until all crops have reached storage position.

"There will be a definite and continued demand for higher class box cars and to the extent car service rules observance can be maintained, the return of home cars to home rails will prove beneficial to improvement of the quality of the box car supply," Mr. Gass asserts, adding that "to that end we urge as strict adherence to the car service rules program as possible."

As for other types of closed cars, Mr. Gass reports that the supply of automobile cars—particularly 50-ft. device cars—while still adequate to meet demands, has at times during the past few weeks been "close in supply." The supply of stock cars, he reports, is "comfortable," and railroads are substituting this type of equipment for the transportation of commodities which would otherwise move in box cars.

Turning to the open-top car situation, the C.S.D. chairman notes that while the 1948 coal loadings in the 45 weeks ended November 16 are approximately 200,000 cars, or 2.6 per cent, below 1947 loadings, they are 7.8 per cent above the 1946 loadings and 6.1 per cent above the 1945 loadings. He goes on to observe that bituminous coal production as of November 7 amounted to 496,211,000 tons, constituting a decrease of 5.7 per cent as compared with 1947's production of 526,086,000 tons as of the same date. "It now appears," he adds, "that 1948 production will not exceed 590,000,000 tons, which, from present indications, should be sufficient for the national needs."

The lake coal program of 52,000,000 tons seems likely to be met, it not exceeded, the C.S.D. chairman continues, while the lake ore program is seen falling short by 3,000,000 or 4,000,000 tons of the 86,000,000-ton goal. In the latter connection, however, it is pointed out that lake ore loadings as of November 8 show an increase of nearly 4,000,000 tons over the 1947 loadings as of the same date.

Mr. Gass is of the opinion that there is some question as to what, if any, adverse effect the longshoremen's strike along the East coast will have on the export coal movement. Barring serious interruption, he observes, it appears likely that 2,500,000 tons will be exported during November and December for a total of about 19,500,000 tons

overseas this year as compared with 1947's record total movement of 41,000,000 tons.

While the loadings of open-top hoppers with all commodities totaled 12,107,332 in the 45 weeks to November 6, or an increase of 2.1 per cent over those loaded in the same period of 1947, and the loadings of covered hoppers increased 11.5 per cent—from 278,582 cars in the first 45 weeks of 1947 to 318,194 cars this year—the loadings of gondolas decreased 3.4 per cent and those of flat cars by 5.1 per cent. Mr. Gass, however, observes that the gondola situation continues "extremely tight" with shortages being reported in all sections of the country and that demands for flats in recent weeks have been "very heavy," particularly in the Middle West-Western area for the loading of agricultural implements. At the same time, he reports that the supply of refrigerator cars as of November 15 was "adequate" in all producing areas.

Other highlights of Mr. Gass' report disclose that (1) freight car retirements in October totaled 6,950, leaving a net gain in car ownership during the month of 1,262, while retirements for the 12 months ended October 31 were 76,782, the net gain in ownership for the 12-month period being 26,282; (2) the average turn-around time of freight cars in October was 12.94 days, the lowest since October, 1947; and (3) the average percentage of detention of cars over the free time in October was 16.17—the highest for any October since 1945.

Study Shows Relationship of Car Lengths and Capacities

The Car Service Division of the Association of American Railroads has prepared for distribution to transportation department officers of the railroads a statement showing how the freight car ownership of the country divides as to lengths of cars of different types and nominal capacities. The data, based on the Railway Equipment Register, indicate the relationships within the various categories on a percentage basis, and also the number of cars of various lengths and capacities separately for the Eastern, Southern and Western districts and the Pocahontas region.

A.A.R. Member Road Meeting

At the annual member road meeting of the Association of American Railroads, held in New York on November 19, 16 of the 17 directors were re-elected, J. D. Farrington, president of the Chicago, Rock Island & Pacific being succeeded on the board by R. L. Williams, president of the Chicago & North Western. Mr. Farrington's place on the executive committee was filled by Charles H. Buford, president of the Chicago, Milwaukee, St. Paul & Pacific, and all officers of the association were re-elected by the new board of directors.

In reviewing the accomplishments of the association during the past year and considering objectives for the year to come, the member road meeting devoted particular attention to car service rules. A result of this discussion was an understanding that return of cars to owning roads would be vigorously policed, and those roads whose freight car ownership is inadequate were put on notice that they will be expected to buy more cars.

Hear Much Protest Against Lake Erie-Ohio River Canal

Some 20 witnesses representing the Upper Ohio Valley Association appeared before a U. S. Army board of engineers at a hearing in Pittsburgh, Pa., November 17-19, inclusive, and protested against the proposed construction of the 105-mi. Lake Erie-Ohio River Canal. As noted in the *Railway Age* of July 24, page 127, army engineers have rendered a report favoring the project.

Witnesses for U.O.V.A. stressed the following points: (1) Realistic estimates indicate that the cost will be nearly \$833,000,000 instead of \$479,000,000; (2) the district engineer has greatly overestimated the volume of traffic; (3) the project is unnecessary and promises no public benefit; (4) construction of the canal will be harmful to the public interest and presents a serious threat to national defense and (5) the project is not feasible from a technical standpoint, has been unfairly presented and has almost no public support.

The association states that it has marshalled its three-state membership of 1,100 individuals, corporations and others in opposition to the canal. It points out that the project, or its related stub-end canal, has been defeated at least 10 times in various stages from preliminary reports to the floor of the Senate. Cost of the proposed canal, says the association, would exceed that of the Panama Canal by more than \$110,000,000, would equal the combined funded debts of 33 states and would amount to more than twice the total expenditures for the entire Ohio Valley waterway project.

The proposal contemplates a 105-mi. canal beginning at the mouth of the Beaver River at Rochester, Pa., and extending up the Beaver and Mahoning Rivers and down the Grand River Valley to Ashtabula, Ohio. Fifteen locks and dams are planned, as well as five bridges in addition to 88 existing railroad and general traffic bridges. Opponents of the project assert that existing bridges will all have to be rebuilt in a "traffic-snarling" operation that will continue for nearly a decade, if present plans go through.

The hearing was based on a report favoring the canal submitted in August, 1947, by Col. Walter E. Lorence, formerly Army district engineer in the Pittsburgh district. He is now executive

vice-president of the Ohio Valley Improvement Association, representing the chief proponents of the canal.

Among those registering opposition at the hearing, which is expected to determine whether the project will go to Congress for consideration, were: W. T. Elmes, assistant chief engineer of the Pittsburgh & Lake Erie; Willard H. McEwen, attorney representing railroad brotherhoods; Robert R. Pierce, Robert K. Payne and Harry Passow, general attorney, real estate and tax agent and dock agent, respectively, of the New York Central, and W. C. Powers and C. P. Wilson, Brotherhood of Locomotive Firemen and Enginemen.

The Gas Turbine Takes to the Rails

The first gas turbine-electric locomotive to be built and operated in the United States, an Alco-GE 4,500-hp. unit, began track tests on November 15, at the General Electric plant in Erie, Pa.

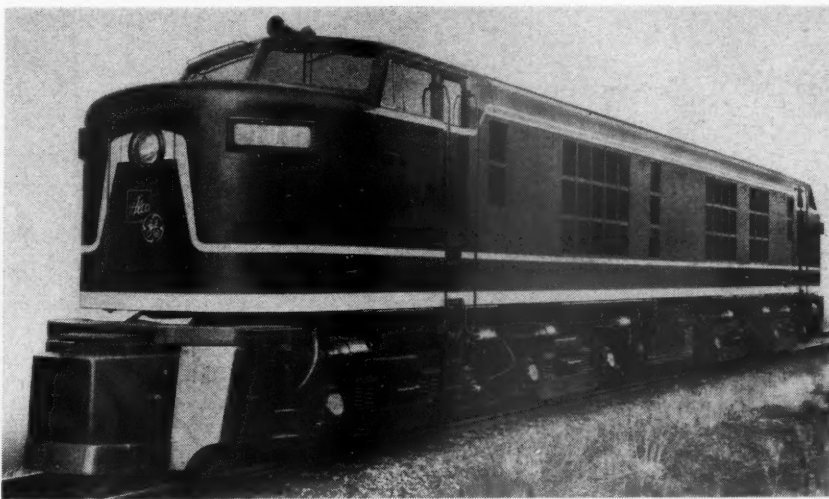
The locomotive will be placed in operation on a demonstration basis by the Union Pacific next spring, after preliminary tests have been completed

in the east. Spokesmen for American Locomotive and General Electric stressed the developmental status of the new locomotive.

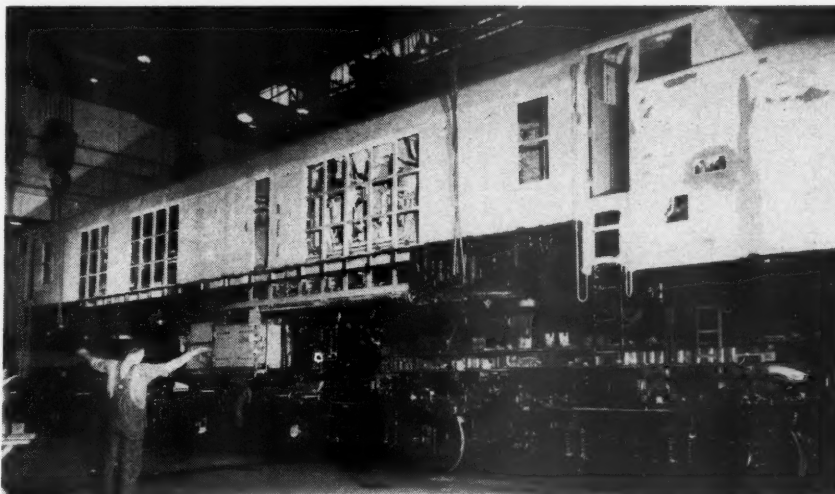
They pointed out that lengthy factory and road tests must be conducted before any real indications of the ultimate success of gas turbine-powered locomotives can be obtained. The new locomotive utilizes the same power plant exhibited in Schenectady, N. Y., last March.

Although the gas turbine currently is fired by bunker "C" oil, Alco-GE spokesmen are hopeful that special research efforts, coupled with experience gained from operation of this first locomotive design, may lead to development of successful means of burning coal in a gas turbine locomotive. They disclosed that Alco-GE is cooperating with the Locomotive Development Committee of Bituminous Coal Research toward that end.

The locomotive is of single-cab construction with an operating station in each end and has B-B-B-B running gear. It develops 53 hp. per foot of length, with a continuous tractive force of 68,400 lb. at 20.4 m.p.h. It is 83 ft.



Above—The gas turbine-electric locomotive on the General Electric test track at Erie, Pa. Below—The cab of the turbine-electric locomotive being lowered onto the trucks



7 1/2 in. long inside of knuckles, 15 ft. 4 5/16 in. high over cab, and 10 ft. 7 in. wide over hand rails. The total weight is 500,000 lb. Geared for 79 m.p.h., the locomotive carries enough fuel for 12 hours operation at 4,500 hp.

The compressor, combustion chamber and turbine are of in-line construction. Air is drawn through a compressor into several combustion chambers. Fuel is injected and the mixture burns, raising the temperature of the compressed air. Resulting gases expand and move at high velocity against the turbine blades, turning the shaft. The shaft drives both the power plant compressor and the generator. Power from the generator is supplied to eight traction motors, each of which drives one of the eight axles.

Saturday and Sunday Operations Essential, Emergency Board Told

"The unions are not asking for a 40-hr. week with payment of time and one-half for work in excess of those hours," J. W. Oram, chief of personnel of the Pennsylvania, testified before the Presidential fact-finding board hearing the wage and reduced work week demands of the 16 non-operating brotherhoods, "but instead are demanding a Monday through Friday work week with time and one-half for Saturdays and double time for Sundays and holidays." Mr. Oram pointed out that railroad employees—at their own request—were excepted from the hours provisions of the Fair Labor Standards Act when it was enacted in 1938 because "they were not willing to assume the same risk of loss in take-home pay that was assumed by employees in many outside industries . . . at a time when the railroads could have obtained additional employees with little difficulty."

D. P. Loomis, chairman of the Association of Western Railways, cited an award made by the so-called Meyer Board which recently heard the demands of the Railway Express employees in New York city for a \$16 weekly wage increase, on top of a reduction in the work week from 44 hr. to 40 hr., without reduction in the weekly pay. The report of this board made on January 15, 1948, is "accompanied by a lengthy opinion supplementing its contention," Mr. Loomis said, "and stands for the following principles:

"(1) In continuous operation industries such as the express and railroad business, penalty pay for particular days as such cannot be justified.

"(2) Before a 40-hr. week—five days of 8-hr. each—can be approved, it must be justified and proven practical under local conditions of each particular area.

"(3) The 40-hr. week should not be used to secure indirectly wage increases in hourly rates of pay. Reduction in the hours of a work week should be paid for by the men, and losses resulting should be diminished only as equities based on local conditions prescribe."

C. C. Shannon, assistant superintendent of transportation, Chicago & North Western, presented evidence showing that—based on 1947 operations—the closing of freight houses on Saturdays to avoid penalty compensation would result in delay in the loading and unloading of freight cars equivalent to the withdrawal of more than 14,600 cars from service. Mr. Shannon testified that freight handlers who are presently paid straight time pay of \$51.84 for six days' work, would, under the compound provisions of the unions' proposals, receive \$80.39 for the same work—an increase of 55.1 per cent.

H. C. Campbell, assistant superintendent of dining car service, Seaboard Air Line, testified that dining car operations were conducted at a loss of \$45 million last year, and that pending union demands would add \$42 million to the annual cost of dining car labor. To demonstrate the effect of the demands, Mr. Campbell stated that they "would increase the wages of each member of the crew of a Pennsylvania dining car operating between New York and Washington from \$227.72 a month to \$453.57, a wage increase of 99.2 per cent. Mr. Campbell presented an exhibit showing that the average number of dining car meals served on Saturdays is in excess of those served Monday through Friday, and the total business done on Sunday is only slightly less than on weekdays. Mr. Campbell said that in July, 1949, for example, only 20 of the 31 days would be non-penalty days, and told the board the only way the railroads could avoid any part of this increase in operating costs "would be to discontinue this service entirely over weekends and holidays."

A. L. Bartlett, assistant chief engineer, New York, New Haven & Hartford, declared that track inspection forces on his railroad would have to continue 80 to 100 per cent of their present work on Saturdays, "despite the application of punitive overtime for work on that day." J. W. Purdy, maintenance of way engineer for the Baltimore & Ohio, testified that the unions'

pay proposals would result in weekly earnings increases ranging from 56 to 67 per cent for many maintenance of way workers.

R. W. Prentice, superintendent, Atchison, Topeka & Santa Fe, cited state laws which require railroads to obtain permission of regulatory bodies to close stations on Saturdays, although the brotherhoods' proposals would make these days penalty days.

"There are 698,921 non-operating employees assigned to positions which are filled six days a week," H. E. Greer, chief examiner of the Association of Western Railways, testified, "and another quarter of a million are assigned to positions which must be filled seven days a week." He said 67 per cent of the six-day positions could be compressed into a five-day Monday through Friday work week provided 83,761 additional employees could be hired.

Manpower is not available to run the nation's railroads on the basis of a 40-hr. week, Dr. Jules Backman, associate professor of economics at New York University's School of Commerce, told the board. He said the only means by which additional employees could be obtained would be by "labor pirating" from other industries, and that "those industries inevitably would attempt to fill the gaps thus created by raiding the labor forces of the railroads and other industries," with resulting "inflationary repercussions." Dr. Backman said average weekly earnings of non-operating railroad employees are slightly more than \$60, as compared with the current average of \$54 for workers in manufacturing industries. "With an increase of 10 cents an hour," he continued, "their weekly earnings would average more than \$65."

Kansas Intrastate Rates

The Interstate Commerce Commission has postponed "to a date to be fixed" the hearing it had scheduled for November 30 in connection with its investigation of intrastate freight rates in Kansas. The investigation, docketed as No. 30035, was instituted by the commission upon petition of Kansas railroads after the Corporation Commission of that state had refused to approve increases in line with the Ex Parte 162 and Ex Parte 166 advances authorized by the I.C.C. for interstate application.

Freight Car Loadings

At the time of going to press, car loadings for the week ended November 20 were not available.

Loadings of revenue freight for the weeks ended November 6 and November 13 (which included election day and Armistice day, both of which are holidays in some states), totaled 843,166 cars, and 871,677 cars, respectively. The summaries for those weeks, as compiled

B. & M. SPONSORS TELEVISION

What is reported to be the first television program sponsored by a railroad has been announced by the Boston & Maine.

The program, "The Boston & Maine Winter Sports Special," is another step in the road's active promotion of winter sports. It will each week introduce an outstanding winter sports personality from one of the ski centers of northern New England, will describe the attractions of each region, and offer instruction in skiing. The program will run for 15 minutes every Thursday at 8:00 p.m. from December 30 to March 3.

The musical theme of the program will be a song, "The Snow Train," written by a Maine Central locomotive engineer, Jesse E. Richardson, of Waterville, Me.

by the Car Service Division, Association of American Railroads, follow:

Revenue Freight Car Loadings			
For the week ended Saturday, November 6			
District	1948	1947	1946
Eastern	155,910	165,673	172,626
Allegheny	111,465	187,565	194,033
Pocahontas	58,088	72,809	68,440
Southern	130,910	136,420	141,715
Northwestern	126,267	128,212	134,237
Central			
Western	36,235	147,669	138,321
Southwestern	69,291	71,822	63,973
Total Western Districts	331,793	347,703	336,531
Total All Roads	843,166	910,170	913,345
Commodities:			
Grain and grain products			
	52,219	49,556	49,424
Livestock	16,360	20,164	23,876
Coal	149,077	191,485	188,788
Coke	14,861	15,054	14,009
Forest products	44,647	45,472	46,256
Ore	62,758	55,862	58,279
Merchandise			
I.C.L.	107,534	121,437	130,874
Miscellaneous	395,710	411,131	401,839
November 6	843,166	910,170	913,345
October 30	931,750	940,746	922,312
October 23	927,532	954,627	942,257
October 16	913,832	954,149	931,766
October 9	891,811	956,862	899,443

Cumulative total
44 weeks 37,430,400 38,764,681 38,934,663

For the week ended Saturday, November 13			
District	1948	1947	1946
Eastern	155,064	161,587	168,342
Allegheny	176,940	183,443	193,969
Pocahontas	71,367	73,972	73,702
Southern	135,153	134,870	144,039
Northwestern	124,779	113,071	135,050
Central			
Western	138,910	142,811	135,484
Southwestern	69,464	69,429	66,538

Total Western Districts	333,153	325,311	337,072
Total All Roads	871,677	878,283	917,124

Grain and grain products			
	54,367	48,578	48,910
Livestock	18,077	19,507	26,732
Coal	174,051	187,503	191,114
Coke	15,251	14,402	14,515
Forest products	46,408	43,299	47,518
Ore	60,049	39,281	59,650
Merchandise			
I.C.L.	107,637	119,832	130,743
Miscellaneous	395,837	405,881	397,942
November 13	871,677	878,283	917,124
November 6	843,166	910,170	913,345
October 30	931,750	940,746	922,312
October 23	927,532	954,627	942,257
October 16	913,832	954,149	931,766

Cumulative total
45 weeks 38,302,077 39,642,964 36,851,787

In Canada.—Carloadings for the week ended November 6 totaled 86,335 as compared with 91,619 cars for the previous week, and 86,788 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
November 6, 1948	86,335	37,469
November 8, 1947	86,788	39,251
Cumulative totals for Canada:		
November 6, 1948	3,523,641	1,656,997
November 8, 1947	3,401,168	1,658,997

Ry Age Financial Dividends Declared C.

Trade Policies Group to Hear A.A.R. Officers December 2

Dr. J. H. Parmelee, vice-president of the Association of American Railroads, and director of its Bureau of Railway Economics, and W. J. Kelly, traffic officer, A.A.R., will represent the "railroad industries" at hearings scheduled for December 2 in connection with the

investigation being conducted by the Senate Trade Policies Committee into the prospective impact of the Supreme Court's April 26 decision upholding the Federal Trade Commission's "cease and desist" order against the cement industry's basing point system of pricing. H. W. Fraser, president of the Order of Railway Conductors, also is scheduled to testify on the same day.

The committee, meanwhile, in hearings ended November 19, heard additional testimony by representatives of various industries, including steel manufacturers. As reported in *Railway Age* of November 20, page 248, the committee earlier obtained the views of members of the F.T.C. and the anti-trust division of the Department of Justice.

With respect to the former group of witnesses, J. L. Block, vice-president of the Inland Steel Company, told the committee that he is not favorably inclined toward a rigid f.o.b. mill selling system, even though, in his judgment, Inland would be "definitely benefited" by legislation which made such a method mandatory. Congress, he said, should give industry a pricing law whose meaning judges and lawyers can agree upon, which the average businessman can understand, and which "truly prevents monopoly and promotes competition."

An oft-heard complaint against the practice of absorbing freight to meet competition, Mr. Block stated, is that it causes wasteful cross-hauling. "Even though high freight rates will greatly reduce this practice," he continued, "it still will prevail to some extent under competitive conditions. However, to me it seems only a small part of the price of freedom. If we would completely avoid wasteful cross-hauling, why not avoid wasteful plant capacity or wasteful energy in any other line. This can be attempted only through detailed regulation and regimentation of our economy. . . . Let us accept some waste if necessary to maintain our free competitive economy with its magnificent returns in lower prices, better goods and more abundant production."

R. L. Gray, president of the Sheffield Steel Corporation, recommended that the committee clarify the law to the extent that it cannot be distorted to enable "this or that agency of the government or individuals thereof to force upon industry strange economic theories under the pretext that industry is unfair and discriminatory without any real evidence that such is the case."

If the method of selling employed by the steel industry had been unfair, Mr. Gray asserted, evidence of that unfairness would have been made clear by complaints against the industry by users of steel. He added, however, that such complaints are "simply not in existence."

Mr. Gray said that Sheffield, which has plants in Texas, Missouri and Oklahoma, would like to see continua-

tion of the multiple basing point system and the "right" to sell its products in any market. "If such remedial legislation and full sanction by the F.T.C. and the courts are not obtained," he concluded, "we can only see the extinction of the relatively small steel plants . . . and the ultimate concentration of all major industry at the doors of large, full-integrated steel plants located in those districts where virgin metal pig iron is produced at the cheapest possible price by reason of the favorable situation as to raw materials."

E. P. Severns, vice-president in charge of sales, Continental Steel Corporation, Kokomo, Ind., took the view that the present pricing policies of the F.T.C. will (1) lessen rather than increase competition; (2) create local monopolies in the area surrounding some mills; (3) deprive some mills of a fair market; and (4) encourage centralization of industry. "For these reasons and also for the purpose of eliminating the uncertainties in the minds of business men as to what they can and cannot do in meeting delivered prices of their competitors," he added, "we strongly recommend new legislation that will clearly legalize the meeting of delivered prices of competitors in a practical, systematic manner. Such action would encourage rather than discourage competition."

Another steel industry spokesman, J. K. Beeson, executive vice-president of the Pittsburgh Steel Company, also recommended clarification of the existing law to permit "consistent" sale of steel products to any customer in any market at any delivered price, providing no "imaginary" freight is included, which will maintain the confidence of that customer, his and our economic well-being and the continuity of our business relationship."

Additional General News
Appears on page 62

ORGANIZATIONS

Transportation Association Warned Against Government Ownership

The surest way to preserve the enterprise system in the United States is to put the transportation industry on a sound basis, members of the Transportation Association of America were told at their recent annual meeting at Chicago.

"There is grave danger of government ownership of transportation in the United States," declared Donald D. Conn, executive vice-president of the association. "Outmoded federal policies, class legislation, and 'horse and buggy' regulation have promoted disintegration

within the industry. Only a thin layer of 15 per cent of the country's production is the difference between solvency and bankruptcy of most common carriers. Economic trends can bring financial collapse in an over-night period. If government ownership becomes the only recourse for the public interest, such a calamity would open the door for regimentation of all elements of our basic industries and natural resources. It would just about finish the enterprise system.

"Only through the teamwork of leaders of farm groups, industries, and financial institutions can a solution be designed before it is too late. These leaders must recognize that this problem now becomes their first obligation if their own enterprises are to be saved from state socialism. They must reach common accord as to basic policies and principles. Conflicts between areas and groups must be harmonized. All elements of the public interest must present a united front to Congress."

Other speakers reported on the major project of the association, working out a new system of federal regulation. Utilizing the services of leaders in all fields—users, investors, and workers in transportation, as well as agencies themselves—the issues are being explored and solutions developed by national panels and regional forums representing all groups, areas and interests. The association proposes to submit a complete report to Congress in 1950.

Business of the session included election of directors and officers and approval of plans for the coming year. The annual report showed 8,100 enterprises on the membership roster, of which 75 per cent are users of all types of transportation, 19 per cent are investors, and 6 per cent transport agencies. The directors approved a total budget of \$492,000 per year.

The following directors were elected: J. L. Burke, president, Stanolind Pipe Line Company, Tulsa, Okla.; F. G. Gurley, president, Atchison, Topeka & Santa Fe, Chicago; Roscoe C. Hobbs, president, Hobbs-Western Company, St. Louis, Mo.; F. W. Marble, president, Stock Growers National Bank, Cheyenne, Wyo.; L. H. Mattson, president, Industrial Chemical Lab., Ltd., Omaha, Neb.; H. A. May, vice-president, Westinghouse Air Brake Company, Wilmerding, Pa.; C. R. Musgrave, vice-president, Phillips Petroleum Company, Bartlesville, Okla.; H. N. McDougall, chairman, National Bank of Commerce, Portland, Me.; J. A. Quinlan, vice-president, St. Regis Paper Company, New York; W. F. Schulten, asst. to first vice-president, Pittsburgh Consolidation Coal Company, Pittsburgh, Pa.; R. E. Woodruff, president, Erie, Cleveland, Ohio; Leroy Kramer, General American Transportation Corporation, Chicago; F. A. Theis, president, Simonds-Shields-Theis Grain Company, Kansas City, Mo.; Dr. C. S. Duncan, economist, Association of American Railroads, Washington, D. C.; W. H. Morris, Jr., vice-president, National Steel Corporation, Pittsburgh, Pa., and Howard C. Mull, vice-president—sales, Warren Tool Corporation, Chicago.

The following were elected to the board of governors:

George A. Blair, Chicago; George R. Carr, chairman, Dearborn Chemical Company, Chicago; L. R. Clausen, chairman, J. I. Case Company, Racine, Wis.; Fairman R. Dick, Dick & Merle-Smith, New York; R. E. Fisher, vice-chairman, San Francisco Bay Area Council, San Francisco, Cal.; M. L. Fleishel, general manager, Perpetual Forests, Inc., St. Marys, Fla.; R. F. Gunkelman, secretary-treas-

urer, Farmers Grain Company, Fargo, N. D.; Fred I. Kent, director, Bankers Trust Company, New York; Charles H. J. Mitchell, publisher, Brookings Register, Brookings, S. D.; A. G. T. Moore, traffic manager, Southern Pine Association, New Orleans, La.; Samuel B. Pettingill, South Bend, Ind.; Arthur J. Puhl, vice-president, Lincoln Printing Company, Chicago, and A. A. D. Rahn, vice-president, Shelvin-McCloud Lumber Company, Minneapolis, Minn.

The Grip Nut Company will sponsor the monthly meeting of the **Kansas City (Mo.) Car Department Association** on December 1, at the Advertising Sales and Executive club, 914 Baltimore avenue. Representatives of Grip Nut will be on hand to demonstrate and discuss the company's products with car men present.

The next meeting of the **Central Railway Club of Buffalo** will be held on December 2, at 8:00 p. m., in the Niagara room of the Hotel Statler, Buffalo, N. Y. A. J. Glover, president of the Switchmen's Union of North America, will address the club on "Labor Unions & Democracy" and Gerhart H. Seger, former member of the German Reichstag, foreign correspondent and member of O. S. S. during World War II, will present "Germany Today—What About Russia?"

The **Indianapolis Car Inspection Association** will hold its annual election of officers for the coming year at its meeting on December 6, at 7:00 p. m., in the assembly room of the Big Four building, Indianapolis, Ind. The program also includes a talk by O. L. Easton, foreman, New York Central, Beech Grove, Ind., on "Drainage of Passenger Cars in Freezing Weather."

The **New York Railroad Club's** seventieth anniversary dinner will be held on Thursday, December 9, at 7:00 p. m., at the Commodore and Biltmore Hotels, New York.

EQUIPMENT AND SUPPLIES

Equipment on Order

Class I railroads and private car lines had 111,405 new freight cars on order on November 1, compared with 126,213 on order November 1, 1947, according to the Association of American Railroads. Of the former total, Class I roads and railroad-owned and controlled private refrigerator car companies had 102,220 new freight cars on order, as compared with 109,467 on order on November 1, 1947.

Cars on order by Class I roads and railroad-owned and controlled private refrigerator car companies on November 1 included 20,568 box cars, of which 20,418 were plain and ventilated and 150 automobile box cars; 46,211 hopper cars, including 4,173 covered hoppers; 22,681 gondolas; 4,449 flat; 6,935 refrigerator;

700 stock and 676 miscellaneous freight cars. Of the total number of new freight cars which Class I roads had on order on November 1, 40,397 will be built in railroad shops and 61,823 in outside shops.

The Class I roads also had 1,630 locomotives on order on November 1, compared with 967 on order on November 1, 1947. The 1948 total included 86 steam and 1,544 Diesel-electric locomotives, compared with 45 steam, four electric and 918 Diesel-electrics on November 1, 1947.

Class I roads and railroad-owned and controlled private refrigerator car companies put 86,000 new freight cars in service in the first 10 months of 1948, compared with 46,308 in the same 1947 period. Of the former total, 8,212 were installed by the railroads in October. In October, 1947, 7,736 new freight cars were put in service.

Those installed so far this year include 35,714 box cars, of which 34,450 were plain and ventilated and 1,264 automobile box cars; 34,877 hopper cars, including 1,607 covered hoppers; 9,097 gondolas; 5,462 refrigerator; 153 flat; 350 stock and 407 miscellaneous freight cars.

The Class I roads also put 1,159 new locomotives in service in the first 10 months of 1948, of which 73 were steam, four electric and 1,082 Diesel-electric. New locomotives installed in the same period last year totaled 676, of which 68 were steam, two electric and 606 Diesel-electric.

The Class I roads and affiliated refrigerator car companies retired 65,937 freight cars in the first 10 months of 1948, of which number 6,950 were retired in October. In the first 10 months of 1947 60,486 cars were retired.

FREIGHT CARS

The **Minneapolis, St. Paul & Sault Ste. Marie** has ordered 35 70-ton steel hopper cars from the General American Transportation Corporation for delivery in the second quarter of 1949.

PASSENGER CARS

The **Minneapolis, St. Paul & Sault Ste. Marie** has ordered two 70-ft. steel baggage cars from the American Car & Foundry Co. for delivery in the fourth quarter of 1949.

LOCOMOTIVES

The **Kentucky & Indiana Terminal** has ordered five 1,000-hp. Diesel-electric switching locomotives from Fairbanks, Morse & Co. for delivery next spring.

SIGNALING

The **Baltimore & Ohio** has ordered materials from the General Railway Signal Company for additions to a me-

chanical interlocking at Hancock, W. Va. This order includes Type-K forced-drop electric locks, Type-K relays, Model-7 switch circuit controllers, welded steel relay cases and Type-U color-position-light signals.

The Spokane, Portland & Seattle has ordered equipment from the General Railway Signal Company for installation of an all-relay electric interlocking at North Portland Junction, Ore. The 12-by-17-in. control panel will be equipped with 8 track indication lights and 9 levers for control of 7 switch machines and 10 signals. Type SA searchlight signals, Model 5D dual-control electric switch machines, Type K relays, Type K ½ transformers and Type BT copper-oxide rectifiers will be used.

The Atlantic Coast Line has placed orders with the Union Switch & Signal Co. for materials to modernize the double-track main line signal system from Contentnea, N. C., to Fayetteville, 60 mi. The order involves H-2 searchlight signals, SL-26 electric locks with T-21 switch mechanisms for main-line hand-thrown switches, and coded track circuit materials involving relays, rectifiers, transformers and housings. The field work will be done by railroad forces.

The St. Louis-San Francisco has placed an order with the Union Switch & Signal Co. for materials required in replacement of a mechanical interlocking plant at Nichols, Mo., by an all-electric interlocking controlled from the existing Style C machine at North Springfield. The order involves the necessary Style M-22A dual control electric switch layouts, Type SL-6A electric switch locks, additions to the existing machine, relays, rectifiers and transformers. The field work will be handled by railway forces.

The Richmond, Fredericksburg & Potomac has placed orders with the Union Switch & Signal Co. for one 18-cylinder double-rail Model-31 retarder and one 20-cylinder double rail Model-31 retarder. These two retarders total 237.17 rail feet of retardation and will replace four retarders of an earlier type in north-bound Potomac yard, Alexandria, Va. They will be installed by railroad forces.

The American Locomotive Company has ordered five sets of intermittent inductive train control equipment from the General Railway Signal Company, to be installed on Diesel-electric freight locomotives for the Erie.

IRON & STEEL

The Bessemer & Lake Erie has ordered 5,700 tons of rail from the Carnegie-Illinois Steel Corporation.

SUPPLY TRADE

Rudolf R. Kopfmann, formerly manager of research and promotion of Associated Business Papers, has joined the eastern advertising sales staff of the Simmons-Boardman Publishing Corporation. In his new capacity, Mr. Kopfmann will represent all Simmons-Boardman transportation periodicals—*Railway Age*, *Railway Mechanical Engineer*, *Railway Engineering and Maintenance*, *Railway Signaling*, and *Marine Engineering and Shipping Review*. He will also be available to continue in an advisory capacity his previous work with the Associated Business Papers promotion committee, of which J. S. Crane, vice-president and secretary of Simmons-Boardman, is chairman.

Mr. Kopfmann was born at New York on August 31, 1917. He studied advertising and selling at Pace In-



Rudolf R. Kopfmann

stitute and New York University, and began his business career with the Public National Bank & Trust Co. of New York. In 1937, after brief periods with the Acme Fast Freight Company, and in the correspondence and sales departments of Brooks Bros., Inc., he joined the staff of Associated Business Papers as assistant to the advertising manager. In 1944 he was advanced to manager of research and promotion. During his connection with A. B. P., Mr. Kopfmann handled its publication and direct mail advertising; supervised its agency recommendation and credit activities; worked with the chairman of its speakers, merchandising and membership committees, and coordinated the activities of various clubs affiliated with the association.

Oakite Products, Inc. has announced the appointments of Donald R. Royal and Paul E. Ward as representatives of the company's railway service division in Atlanta, Ga., and Chicago, respectively. Mr. Royal was formerly with the Illinois Central for 18 years, where he began his career as an apprentice at

Birmingham, Ala., advancing to general foreman of the road's locomotive department at Centralia, Ill. He held this position until his present appointment. Mr. Royal's record includes experience in locomotive and car depart-



Donald R. Royal

ment operations, as well as extensive service in connection with Diesel, steam locomotive and car maintenance and shopping procedures. In his new position he will operate out of Oakite's Atlanta offices, serving roads in the southeastern area.

Mr. Ward was formerly with the locomotive department of the Chicago,



Paul E. Ward

Burlington & Quincy for eight years, which he left to represent the Locomotive Finish Materials Company, Atchison, Kan. In his new position with Oakite, Mr. Ward will serve the railroads in the Midwest area.

The Whiting Corporation, Harvey, Ill., has announced two executive promotions as the "first step in a program to streamline and strengthen the Whiting sales organization and to increase its efficiency in a period of growing competition." G. E. Seavoy, vice-president in charge of the process sales division, has been appointed to direct all field sales

operations, including advertising, field erection and service. M. J. Rice, vice-president in charge of the industrial sales division, will direct all of the company's product sales divisions.

Fred S. Ehrman, general sales manager of Bowser, Incorporated, Fort Wayne, Ind., has been elected to the newly created post of vice-president and director of sales.

OBITUARY

Frank E. McAllister, who retired in July, 1942, as president and general manager of the Kalamazoo Manufacturing Company, Kalamazoo, Mich., and who relinquished the post of board chairman later that year died aboard a train as it was leaving Chicago on October 30.

CONSTRUCTION

Baltimore & Ohio.—This road has awarded the following contracts, the total estimated cost of which is \$360,000: To the McLean Contracting Company, Baltimore, Md., for constructing the substructure and approaches for a project involving the reconstruction of bridge 3-A on the Curtis Bay branch, Brooklyn (Baltimore), Md.; to the Ellington Miller Company, Chicago, for constructing a service building in the Barr yard, Chicago; to the Walter Construction Company, Cincinnati, Ohio, for constructing an office, locker and toilet building at East Dayton, Ohio; to the Steiner Construction Company, Baltimore, for altering a building at 3141-43 Washington boulevard, Baltimore; and to the Arundel Corporation, Baltimore, for dredging an existing slip to a grade 25 ft. below mean low water level, Howland Hook, Staten Island, N. Y.

Florida East Coast.—Contracts have been awarded by this road for a project costing an estimated \$182,000 and involving the construction of a warehouse building, an office building, tracks and driveways at Miami, Fla. John B. Orr, Inc., of Miami, will erect the buildings, the paving will be done by Troup Bros., also of Miami, and the tracks will be laid by the road's own forces. Another project, involving the construction of tracks to serve the State Farmers Market at Fort Pierce, Fla., will cost an estimated \$69,000. The Cleary Brothers Constructing Company, West Palm Beach, Fla., will do the grading and allied work; and Bailes-Sey, Inc., Jacksonville, Fla., will lay the track. The road has authorized the construction of a wye track and servicing facilities for Diesel-electric locomotives at Fort Pierce at a probable cost of \$103,000.

Long Island.—This road has authorized the construction of the Glen Cove Back Road bridge at Greenvale, N. Y., at a probable cost of \$195,000.

Reading.—This road has awarded the following contracts, at the indicated estimated costs: To the J. E. Brenneman Company, Philadelphia, Pa., for repairs to pier C at Philadelphia (\$60,000); and to the Haverstick-Borthwick Company, Philadelphia, for repairs to a terminal warehouse building in the same city (\$24,000).

FINANCIAL

Baltimore & Ohio.—*Acquisition and Dividend.*—Stockholders of this road, at the annual meeting in Baltimore, Md., on November 15, approved the taking into direct ownership of two of the road's subsidiaries: The Baltimore & Ohio & Chicago and the Baltimore & Ohio Southwestern. Also approved by the stockholders was the purchase of the entire stock of the Centralia & Webster Springs for \$35,000 (see *Railway Age* of November 13, page 66).

B. & O. directors have declared a dividend of \$1 a share on the preferred stock, payable December 22 to stockholders of record November 27. Roy B. White, president, said the dividend was the first on that issue since 1931 and that future dividends will depend on earnings.

Chesapeake & Ohio.—*Bonds.*—This road has sold, subject to Interstate Commerce Commission approval, \$40,000,000 of series H refunding and improvement mortgage bonds, due in 1973, to Halsey, Stuart & Co. and associates, on a bid of 98.65 for a 3½ per cent annual interest rate. The purchase price represents a net interest cost basis to the C. & O. of about 3.96 per cent (See *Railway Age* of November 6, page 66). The bonds were reoffered to the public at 100¾.

Chicago, Rock Island & Pacific.—*Dividend.*—This road has declared a regular dividend of 75 cents a share on its common stock and a special dividend of 75 cents to compensate for no dividend on that issue in the first quarter of the year. Both payments will be made December 30 to stockholders of record December 10.

Duluth, South Shore & Atlantic.—*Reorganization.*—The plan of reorganization for this company and its subsidiary debtor, the Mineral Range, pursuant to section 77 of the Bankruptcy Act, has been submitted by the Interstate Commerce Commission to six classes of security holders for their acceptance or rejection. The plan was approved by the commission's Division

4 on June 19, 1947, and by the federal district court on July 31. The ballots of the security holders involved are due at the commission's Washington, D. C., offices on or before January 14, 1949.

The six classes of security holders entitled to vote are holders of (1) Marquette, Houston & Ontonagon and Marquette & Western 6 per cent bonds, due January 1, 1947; (2) D. S. S. & A. first mortgage 5 per cent bonds, due January 1, 1937; (3) D. S. S. & A. first consolidated 100-year gold mortgage 4 per cent bonds, dated July 17, 1890; (4) M. R. consolidated 4 per cent and 5 per cent gold bonds, dated January 1, 1891, and due January 1, 1931; (5) Hancock & Calumet consolidated 5 per cent 40-year gold bonds, due January 1, 1931; and (6) M. R. general 4 per cent 50-year gold bonds, due January 1, 1951.

Minneapolis & St. Louis.—*Dividend.*—This road has declared a dividend of 50 cents a share on its capital stock, payable December 20 to stockholders of record December 6. The previous payment on this issue was 25 cents a share on October 15.

New York, Chicago & St. Louis.—*Lease.*—The Interstate Commerce Commission has permitted the Akron, Canton & Youngstown to intervene in the Finance Docket No. 16308 proceeding, wherein the New York, Chicago & St. Louis and Wheeling & Lake Erie seek commission approval of an agreement under which the Nickel Plate would lease all lines and certain other properties and rights of the W. & L.E. and assume obligation and liability in respect of the W. & L.E.'s securities (see *Railway Age* of October 23, page 62).

The A. C. & Y., which connects with the Nickel Plate at Bluffton, Ohio, and Delphos, and with the W. & L.E. at Mogadore, Ohio, and Spencer, asserted that the joint application should be denied unless the commission's order provides for maintenance of joint rates, through routes and channels of trade and commerce, and divisions of, or customary basis of apportioning revenues from, joint rates. The commission's order, it said, also should provide for continuance of present practices with respect to billing shipments, routing traffic and distributing unrouted traffic.

The commission, meanwhile, denied a petition filed in the proceeding by the Nickel Plate for the issuance of a subpoena duces tecum requiring B. F. Pepper, president of the Pennroad Corporation, to present at the hearing starting November 18 documents or correspondence other than those which would be voluntarily brought by him.

Mr. Pepper, the commission's order said, would voluntarily appear at the hearing to testify and would bring copies of all resolutions of the board of directors and the executive and finance committees of Pennroad from January 1 relating to the lease involved, or to any negotiations for the sale of

W. & L.E. stock held by Pennroad, in addition to all copies of correspondence, if any, between Pennroad and Harri- man, Ripley & Co. or any other in- vestment bankers relating to the pro- posed lease or possible sale of W. & L.E. stock.

Northern Pacific.—Annual Report.—Operating revenues of this road in 1947 were \$142,591,147, compared with \$126,744,079 in the preceding year. Op- erating expenses were \$112,436,547, compared with \$105,794,660. Fixed charges were \$10,458,852, compared with \$10,558,802. Net income totaled \$13,379,703, compared with \$8,881,146. Current assets at the end of the year were \$79,649,946, compared with \$79,134,093. Current liabilities amounted to \$35,190,358 compared with \$30,779,024. Long term debt was \$270,718,968, com- pared with \$275,457,108.

Ontario Northland.—Annual Report.—Operating revenues of this road in the fiscal year ended March 31, 1947, to- taled \$8,985,895, compared with \$7,827,501 in the preceding fiscal year. Oper- ating expenses were \$7,032,387, com- pared with \$5,872,970. Net income was \$1,295,654, compared with \$1,390,331.

Pennsylvania.—New Director.—John B. Hollister, an attorney of Cincinnati, Ohio, has been elected a director of this road to succeed the late Richard D. Wood.

Pittsburgh & Lake Erie.—Annual Report.—Operating revenues of this road last year totaled \$38,077,699, compared with \$27,903,378 in 1946. Operating expenses were \$31,281,838, compared with \$28,999,873. Fixed charges amounted to \$41,504, compared with \$41,741. Net income was \$6,634,479, compared with \$3,661,346. Current assets at the end of the year were \$20,567,698, compared with \$13,946,747. Current liabilities were \$13,274,089. Long term debt was \$59,764, compared with \$59,769.

Rutland.—Annual Report.—Operating revenues of this road in 1947 were \$5,838,019 compared with \$5,119,450 in the preceding year. Operating expenses were \$5,463,457, compared with \$4,668,041. Fixed charges were \$401,171, com- pared with \$401,150. The net deficit was \$869,673, compared with a net deficit of \$605,709. Current assets at the end of the year totaled \$1,783,919, compared with \$1,840,944. Current liabilities were \$932,599, compared with \$664,966. Long term debt was unchanged at \$9,216,000.

St. Louis Southwestern.—Bonds of Para- gould Southeastern.—Division 4 of the Interstate Commerce Commission has authorized the Paragould Southeastern, operated under lease by the St. Louis Southwestern, to extend from January 1, 1944, to July 1, 1990, the maturity date of not exceeding \$511,000 of its 5 per cent first and refunding mortgage bonds. At the same time, the commis- sion has authorized the S. L. S.W., which owns the bonds and all of the

P. S. E.'s capital stock, to continue to assume obligation and liability, as guarantor, in respect of payment of principal and interest of the bonds as extended. The bonds matured during the pendency of the reorganization prece- dings of the parent company. The P. S. E., meanwhile, was and is not now able to pay the bonds and payment is not desired by the S. L. S.W. nor by the trustee as pledgee thereof under the general and refunding mortgage of the S. L. S.W.

Texas & Northern.—Acquisition.—Divi- sion 4 of the Interstate Commerce Com- mission has authorized this new company to acquire and operate a line extending from a point near the site of the Lone Star Steel Company, Lone Star, Tex., to a connection with the Louisiana & Arkansas at a point know as Veal's Switch, 11 miles. The line is now owned by the steel company, which purchased it from the Defense Plant Corporation. The commission also has authorized the T. & N. to issue not exceeding \$550,000 of common stock, consisting of 5,500 shares of a par value of \$100 each, to be sold at par, with proceeds to be applied toward purchase of the line.

Wheeling & Lake Erie.—Annual Report.—Operating revenues of this road last year amounted to \$30,265,183, compared with \$21,303,141 in 1946. Operating ex- penses totaled \$19,770,948, compared with \$15,878,658. Fixed charges were \$644,556, compared with \$610,771. Net income was \$6,480,359, compared with \$3,790,148. Current assets at the end of the year were \$16,816,929, compared with \$13,449,599. Current liabilities were \$9,136,942, compared with \$6,167,881. Long term debt was \$25,697,000, compared with \$18,188,000.

Wheeling & Lake Erie.—Dividend.—This road has declared an extra dividend of 68¾ cents a share on its common stock, payable December 27 to stockholders of record December 16.

Wilkes-Barre & Scranton.—Bonds.—Di- vision 4 of the Interstate Commerce Commission has authorized this road, operated under lease by the Central of Pennsylvania, to further extend from May 1 to May 1, 1973, the maturity date of not exceeding \$500,000 of its 4½ per cent first mortgage bonds. The applicant, the commission's report said, did not have the necessary funds to pay the bonds on their maturity date; and the Lehigh Coal & Navigation Com- pany, holder of all the bonds, has consented to the extension. The bonds originally were due May 1, 1938.

Wisconsin Central.—Reorganization.—Division 4 of the Interstate Commerce Commission has set January 11, 1949, as a date of further hearing in the Fi- nance Docket No. 14720 proceeding, pertaining to reorganization of this road under section 77 of the Bankruptcy Act. The hearing will be held at the United States Court House, Minne-

apolis, Minn., before Examiner H. H. Kirby, for the purpose of receiving (1) evidence relating to modification of the plan approved by Division 4 in 1947 and with respect to the formula adopted therein for segregation of earnings among the several mortgage divisions of the debtor's road as a basis for al- location of new securities to the re- spective classes of the debtor's secured creditors; (2) evidence essential to bring the record of the debtor's opera- tions up to date and to assist in re- consideration of the approved plan; and (3) evidence in support of or in opposi- tion to any other plans or modifications of plans that may be proposed.

Investment House Publications

[The surveys listed herein are, for the most part, prepared by financial houses for the in- formation of their customers. Knowing that many such surveys contain valuable infor- mation, *Railway Age* lists them as a service to its readers but assumes no responsibility for facts or opinions they may contain bearing upon the attractiveness of specific securities.]

Baker, Weeks & Harden, One Wall st., New York 5, N. Y.

1948 *Railroad Earnings Estimates* (October 7).

Lehigh Valley (Summary of talk by C. A. Major before the New York So- ciety of Security Analysts, October 8).

New York Central (Summary of talk by Willard Place before the New York Society of Security Analysts, Septem- ber 30).

Dreyfus & Co., 50 Broadway, New York 4, N. Y.

Chicago & North Western (Septem- ber 10, No. 320).

Wisconsin Central (October 5, No. 321).

Graham, Parsons & Co., 14 Wall st., New York 5, N. Y.

Chicago, Rock Island & Pacific (September 13).

Halsey, Stuart & Co., 35 Wall st., New York 5, N. Y.

The Investment Merits of Selected Railroad Bonds.

Railroad Equipment Certificates: A Time-Tested Investment Especially Adapted to the Needs of Banks, Insti- tutions and Other Conservative Inves- tors.

Merrill Lynch, Pierce, Fenner & Beane, 70 Pine st., New York 5, N. Y.

Railroads—Earnings and Dividend Prospects of 38 Major Railroads Re- viewed (September 28, No. 403).

Railroads—Effect of Increased Wages vs. Rate Relief Required (October 13, No. 427).

Vilas & Hickey, 49 Wall st., New York 5, N. Y.

Erie (November 12).

New Securities

Division 4 of the Interstate Commerce Commission has authorized:

Atlantic Coast Line-Louisville & Nash-

ville.—To assume joint liability for \$1,320,000 of series C equipment trust certificates to be issued by the applicants' lessor, the Clinchfield. The proceeds will be applied toward purchase of Diesel-electric locomotives at a cost of approximately \$1,665,513, as noted in *Railway Age* of October 30, page 104. The certificates will be dated November 1 and will mature in 15 annual installments of \$88,000, starting November 1, 1949. The report also approves a selling price of 99.217 with a 2½ per cent interest rate, the bid of R. W. Pressprich & Co. and Freeman & Co., on which basis the average annual cost will be approximately 2.49 per cent. The certificates were reoffered to the public at prices yielding from 1.55 per cent to 2.675 per cent, according to maturity.

Chicago, St. Paul, Minneapolis & Omaha.—To assume liability for \$2,100,000 of equipment trust certificates, proceeds of which will be applied toward purchase of equipment estimated to cost \$2,649,145, as described in *Railway Age* of October 16, page 88. The certificates will be dated December 1 and will mature in 15 annual installments of \$140,000, starting December 1, 1949. The report also approves a selling price of 99.46 with a 2½ per cent interest rate, the bid of Salomon Brothers & Hutzler, and associates, on which basis the average annual cost will be approximately 2.71 per cent. The certificates were reoffered to the public at prices yielding from 1.6 per cent to 2.875 per cent, according to maturity.

New York, Chicago & St. Louis.—To assume liability for \$4,600,000 of equipment trust certificates, proceeds of which will be applied toward purchase of equipment estimated to cost \$5,767,503, as described in *Railway Age* of October 30, page 106. The certificates will be dated December 1 and will mature in 20 semi-annual installments of \$230,000, starting June 1, 1949. The report also approves a selling price of 99.354 with a 2¼ per cent interest rate, the bid of Salomon Brothers & Hutzler, and associates, on which basis the average annual cost will be approximately 2.39 per cent. The certificates were reoffered to the public at prices yielding from 1.45 per cent to 2.55 per cent, according to maturity.

Waterloo, Cedar Falls & Northern.—to issue \$1,704,900 of common capital stock, consisting of 170,490 shares of the par value of \$10 a share. The stock will be exchanged for 56,510 shares of no-par stock (stated value \$30 a share) now outstanding and liabilities which the applicant has to issue 320 shares in connection with a bond-conversion plan. The exchange will be in the ratio of three shares of new stock for each share of existing and potential stock. The stock split, the applicant said, will enable it to increase the marketability of the stock and widen the distribution of the public's holdings thereof, thus facilitating the financing of the road's future requirements through sale of common stock rather than by issue of fixed interest-bearing obligations.

Applications have been filed with the I.C.C. by:

Seaboard Air Line.—To assume liability for \$3,255,000 of series E equipment

trust certificates, the proceeds of which will be applied toward the cost of the following equipment:

Description and Builder	Estimated Total Cost
150 70-ton steel hopper cars (Pullman-Standard Car Manufacturing Company)	\$ 765,000
100 70-ton all-steel phosphate cars (Pullman-Standard)	710,500
200 70-ton covered hopper cars (Greenville Steel Car Company)	1,225,200
4 2,000-hp. Diesel-electric passenger locomotives (Electro-Motive Division, General Motors Corporation)	914,748
5 1,500-hp. Diesel-electric freight locomotives (American Locomotive Company)	743,393

The certificates, to be sold on the basis of competitive bidding, will be dated January 1, 1949, and will mature in 15 annual installments of \$217,000, starting January 1, 1950.

Tennessee Central.—To issue \$918,000 of series F 3 per cent equipment trust certificates, the proceeds of which will be applied toward the purchase of six 1,500-hp. Diesel-electric road-freight locomotives from the American Locomotive Company for \$1,020,000. The applicant also has asked the commission to approve the purchase of the certificates by the Reconstruction Finance Corporation. The certificates would be dated March 1, 1949, and would mature in 20 semi-annual installments of \$46,000, starting September 1, 1949, with the final installment to be in the amount of \$44,000.

Average Prices Stocks and Bonds

	Nov. 16	Last week	Last year
Average price of 20 representative railway stocks	44.79	44.18	46.58
Average price of 20 representative railway bonds	88.02	87.65	85.48
	Nov. 22	Last week	Last year
Average price of 20 representative railway stocks	44.28	44.79	46.88
Average price of 20 representative railway bonds	88.50	88.02	85.44

Dividends Declared

Baltimore & Ohio.—4% non-cumulative preferred (resumed), \$1.00, payable December 22 to holders of record November 27.

Central Northern.—class A, 2½%, — semi-annually; 5% preference, 25¢, semi-annually; both payable November 15 to holders of record November 1.

Chicago, Rock Island & Pacific.—common, 75¢; special, 75¢; both payable December 30 to holders of record December 10.

Cincinnati, New Orleans & Texas Pacific.—common, \$4.00, payable December 18 to holders of record December 6; 5% preferred, \$1.25, quarterly, payable March 1, 1949, to holders of record February 15, 1949; 5% preferred, \$1.25, quarterly, payable June 1, 1949, to holders of record May 15, 1949; 5% preferred, \$1.25, quarterly, payable September 1, 1949, to holders of record August 15, 1949; 5% preferred, \$1.25, quarterly, payable December 1, 1949, to holders of record November 15, 1949.

Erie & Pittsburgh.—7% guaranteed, 87½¢, payable December 10 to holders of record November 30.

Illinois Central.—Leased lines 4% guaranteed, \$2.00, semi-annually, payable January 2, 1949 to holders of record December 11.

Minneapolis & St. Louis.—50¢, payable December 20 to holders of record December 9.

Pittsburgh & Lake Erie.—irregular, \$5.00, payable December 15 to holders of record November 24.

Southern Pacific.—\$1.25, quarterly, payable December 20 to holders of record November 29.

Virginian.—62½¢, quarterly, payable January 3, 1949 to holders of record December 17.

Wheeling & Lake Erie.—75¢, quarterly; extra, 68¾¢ both payable December 27 to holders of record December 16.

RAILWAY OFFICERS

EXECUTIVE

Kirby M. Post, whose retirement as operating vice-president of the St. Louis Southwestern at St. Louis, Mo. was reported in the *Railway Age* of November 6, was born at Gatesville, Tex., on April 10, 1886, and was educated in the primary and secondary schools of that city. He began his railroad career in 1904 as a messenger for the Cotton Belt in his home town, after which he served successively as clerk, telegrapher, station agent, train dispatcher and chief dispatcher until 1920, when he became



Kirby M. Post

assistant superintendent of the St. Louis Southwestern of Texas. In 1921 he became superintendent of the Texas division, in which position he served until 1929, when he was appointed assistant to the president of the railroad. In 1931 Mr. Post was promoted to general superintendent, with headquarters at Tyler, Tex., which position he held at the time of his promotion to chief operating officer in 1946. When the Cotton Belt emerged from receivership in 1947, Mr. Post's title became vice-president in charge of operations.

William E. Hayes, assistant to president of the Chicago, Rock Island & Pacific at Chicago, has been appointed executive assistant—public relations, with the same headquarters. Mr. Hayes will assume all duties formerly performed by the late **Timothy J. O'Shaughnessy**, public relations officer, whose death on October 30 was reported in the *Railway Age* of November 6. The post of public relations officer has been abolished. A photograph of Mr. Hayes and a sketch of his career appeared in the *Railway Age* of February 7, 1948, in connection with his appointment as assistant to president.

Joseph L. Sorensen, formerly assistant superintendent of the Chicago River & Indiana and the Chicago Junction, with headquarters at Chicago, has been elected vice-president of the Monongahela Con-

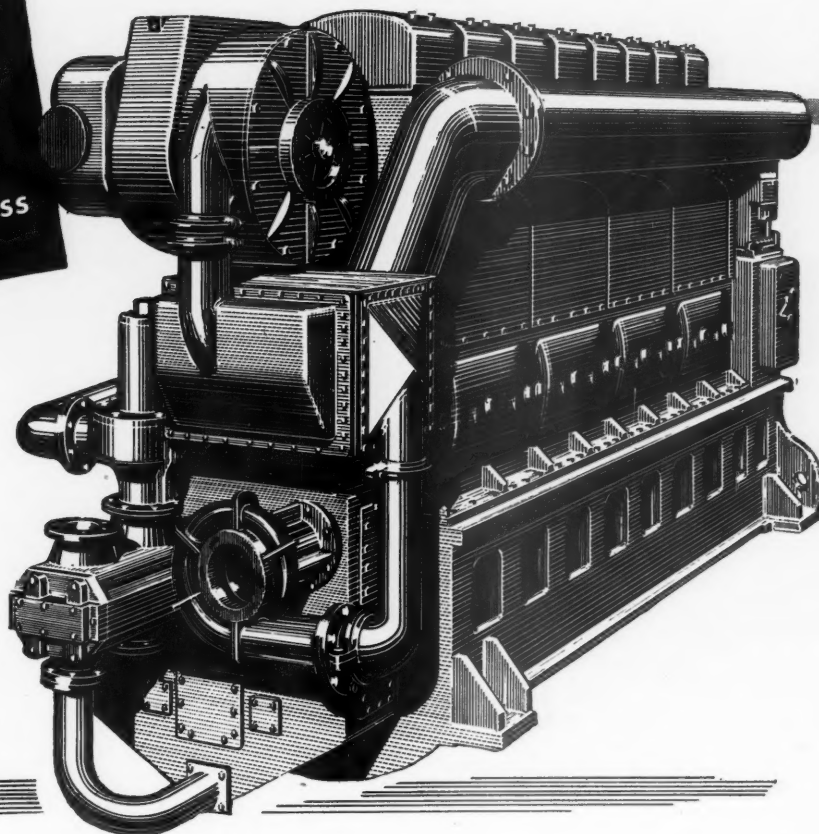
THE NEW **HAMILTON 9x12 DIESEL**

**Ratings up to 1200 hp
... Extremely high
specific output ...
Unequalled ruggedness**

DIMENSIONS

This new Hamilton diesel is of vertical 4-cycle design, normally aspirated or supercharged. Dimensions for the 8-cylinder design (not including generator) are — length 13' 5¼"; height 6' 7¼"; height with clearance to remove pistons 7' 10½"; width 4' 3½".

This diesel is also available in 6 cylinders, normally aspirated or supercharged.



This engine is brand new — from sub-base up to cylinder heads. It is one of the heaviest duty diesel engines of its kind ever built. It is designed for extremely high working pressures — higher than any now employed by comparable engines. Its rating, for 8 cylinders supercharged, at sea level, is conservatively set at 1200 horsepower.

An outstanding feature is the intercooler. Provision for cooling the supercharged air before it enters the engine — almost unknown in the United States today — together with extremely high specific output — puts this diesel ahead of any other in its field.

Maintenance has been given special consideration in the design. Every part requiring attention is easily accessible — in most cases without disturbing other parts. Construction is rugged throughout, with all working parts of unusually generous dimensions.

The new Hamilton 9 by 12 diesel is manufactured by Lima-Hamilton at its Hooven, Owens, Rentschler Co. Division. For full specifications and performance data, write the factory at Hamilton, Ohio, or Sales Offices in New York or Chicago.



DIVISIONS: Hamilton, Ohio—Hooven, Owens, Rentschler Co.; Niles Tool Works Co., Lima, Ohio—Lima Locomotive Works Division; Lima Shovel and Crane Division. Middletown, Ohio—United Welding Co.

PRINCIPAL PRODUCTS: Hamilton diesel and steam engines; Hamilton-Kruse automatic can-making machinery; Hamilton heavy metal stamping presses; Niles heavy machine tools; Special heavy machinery; Heavy iron castings; Weldments; Locomotives; Cranes and shovels.

necting, with headquarters at Pittsburgh, Pa.

Jay C. Jasper, whose promotion to executive assistant to president of the Southern Pacific at San Francisco, Cal., was reported in the *Railway Age* of October 30, was born on May 5, 1905, in London, Eng. Mr. Jasper attended high school in Oakland, Cal., and entered railway service with the S. P. in 1922. He held various clerical positions until 1929, when he became ac-



Jay C. Jasper

countant in the office of the auditor of miscellaneous accounts. He was advanced to traveling auditor in 1936, to special accountant in the office of assistant general auditor in 1943, and to assistant to assistant general auditor in 1945. Mr. Jasper was further promoted on May 1, 1947, to the position of assistant to general auditor, which post he held at the time of his recent advancement.

W. E. Bolton, industrial commissioner of the Chicago, Rock Island & Pacific, has been advanced to assistant to president, with headquarters at Chicago. Mr. Bolton will retain jurisdiction and supervision over the Rock Island's industrial and agricultural department and perform such other duties as are assigned by the president.

B. S. Sines, vice-president of the Southern Pacific of Mexico at Guadalajara, Mex., has been elected president of that company, effective December 1, succeeding **J. A. Small**, who will retire on November 30.

William C. Purnell, general counsel of the Western Maryland, with headquarters at Baltimore, Md., has been elected also vice-president of the company.

FINANCIAL LEGAL and ACCOUNTING

Morris G. Seigler, whose appointment as assistant to comptroller of the Atlantic Coast Line at Wilmington, N. C., was reported in the *Railway Age* of October 16, was born at Plum Branch, S. C. Mr. Seigler attended the Rich-

mond (Va.) Military Academy and the University of Tennessee at Knoxville, entering railroad service on the Georgia in January, 1911, as general accountant. He subsequently became examiner and chief examiner (examiner in



Morris G. Seigler

charge), Interstate Commerce Commission, Bureau of Accounts, at Nashville, Tenn. Mr. Seigler was serving as assistant to general manager of the Nashville, Chattanooga & St. Louis at Nashville at the time of his recent appointment to the Atlantic Coast Line.

Oscar Lindstrand, assistant general solicitor in the legal department of the Pennsylvania's Western region at Chicago, has been promoted to assistant general counsel at that point.

Thomas O. Broker, assistant general counsel of the Lehigh Valley at New York, has been appointed assistant general counsel of the New York, Chicago & St. Louis at Cleveland, Ohio. A photograph and biography of Mr. Broker were published in the *Railway Age* of February 14, page 363.

OPERATING

Roy E. Baker, superintendent of car maintenance of the Boston & Maine and the Maine Central, with headquarters at Boston, Mass., has been appointed assistant general manager of those roads, with jurisdiction in the mechanical department.

William Tyler Ross, supervisor of transportation of the Norfolk & Western, has been promoted to assistant superintendent of transportation, with headquarters at Roanoke, Va.

M. B. Phipps, assistant general superintendent of the New York, Chicago & St. Louis, has been promoted to general superintendent, with headquarters at Bellevue, Ohio, succeeding **Paul L. Pepper**, who has been appointed director of personnel at Cleveland, Ohio. **G. R. Bowman**, superintendent of the Buffalo-Cleveland division, with

headquarters at Conneaut, Ohio, has been appointed assistant general superintendent, succeeding Mr. Phipps. **R. D. Maloney**, superintendent of the Lake Erie and Western district at Muncie, Ind., has been transferred to Conneaut, to succeed Mr. Bowman. **Z. T. Komarek**, whose appointment as superintendent of the Clover Leaf district at Frankfort, Ind., was reported in the *Railway Age* of November 6, has been transferred to the Lake Erie and Western district, to succeed Mr. Maloney. **Edward B. Hunter**, assistant to the general manager at



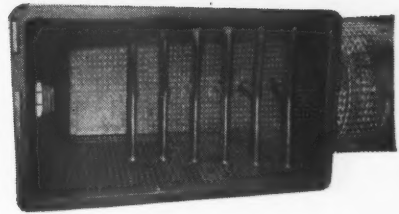
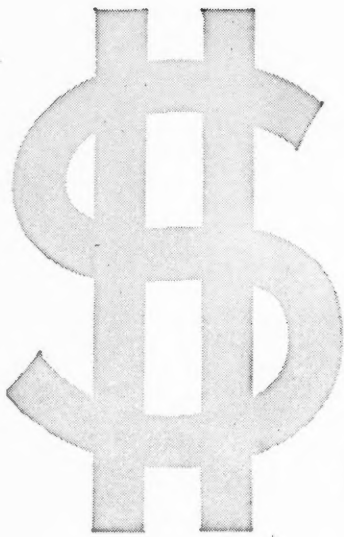
M. B. Phipps

Cleveland, replaces Mr. Komarek at Frankfort.

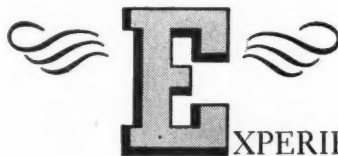
Mr. Phipps, who is 48 years of age, joined the Nickel Plate in 1917, as baggage master and machinist helper at Bellevue. He has served in various capacities at Cleveland; Stony Island, Ill.; Fostoria, Ohio; Fort Wayne, Ind.; and Conneaut. Mr. Phipps was superintendent of the Buffalo-Cleveland division at Conneaut for two years prior to his appointment as assistant general superintendent.

William E. Curley, superintendent of freight service, Chicago terminal of the Illinois Central, will become terminal superintendent at Chicago on December 1, succeeding **Joseph T. Stanford**, terminal manager, who will retire on November 30, upon completion of 49 years of railroad service. Mr. Curley will be succeeded by **J. M. O'Connor**, terminal superintendent at East St. Louis, Ill., who in turn will be replaced by **S. C. Jones**, trainmaster at Louisville, Ky.

Mr. Stanford started with the I. C. as agent and operator at Kankakee, Ill., in 1899. From 1902 to 1906, he was successively agent and operator for the Northern Pacific, Great Northern, Southern Pacific and Wisconsin Central. He returned to the I. C. in 1906 as agent and operator. In 1909 he became chief clerk to the superintendent at Chicago, and later he became general yardmaster. Mr. Stanford helped to establish the superintendent's office at Champaign, Ill., in October, 1918. From



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FROM GREATER
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EXPERIENCE on many
railroads, under all kinds of operating conditions,
has shown that in addition to improving the steam-
ing performance of a locomotive, the installation
of Security Circulators definitely reduces honey-
combing, flue plugging and cinder cutting, and
also lengthens the life of the arch brick.

This makes it possible to utilize the locomotive
more continuously between shoppings—thereby
increasing its effective earning capacity and
decreasing maintenance expense.

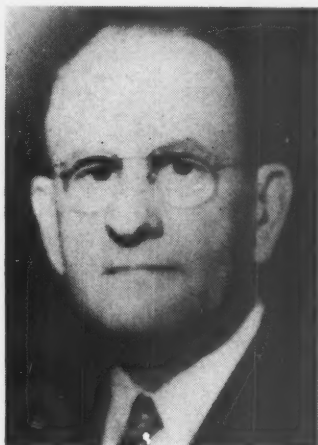
SECURITY CIRCULATOR DIVISION

AMERICAN ARCH COMPANY INC.

NEW YORK • CHICAGO

1920 to 1930, he served as trainmaster at Champaign, with the exception of special duty with the American Railway Association (now Association of American Railroads) in 1925, and on the staff of the general superintendent of transportation in 1926. From 1930 to 1941, Mr. Stanford served as division superintendent successively at Fort Dodge, Iowa, Carbondale, Ill., Vicksburg, Miss., Waterloo, Iowa, and Champaign. He became terminal manager at Chicago on July 1, 1941.

Austin W. Maloy, trainmaster of the Fitchburg division of the Boston & Maine at Greenfield, Mass., has been promoted to superintendent of the New Hampshire division, with headquarters at Concord, N. H., succeeding **Arthur W. Perkins**, who will retire from active service on November 30. Mr. Maloy entered the service of the Boston & Maine in 1903 as an operator at Nashua, N. H., becoming relief dispatcher in 1907; general yardmaster at Ayer, Mass., in 1914 and night dispatcher at



Austin W. Maloy

Springfield, Mass., in 1918. He became trainmaster at Springfield in 1927, transferring to Greenfield in 1930.

Mr. Perkins started railroading as an operator on the Concord (now part of the B. & M.) in 1897 at Potter Place, N. H. He subsequently served as freight brakeman, towerman and dispatcher, becoming chief dispatcher of the Southern division in 1905. In December, 1922, Mr. Perkins was promoted to trainmaster of the Southern division and in February, 1927, became superintendent of the Connecticut River division, with headquarters at Springfield, transferring in 1930 back to the Southern division (now New Hampshire division). Mr. Perkins has just been elected a county commissioner at Concord, to take office January 1.

Eugene L. Hofmann, superintendent of the Long Island at Jamaica, N. Y., has been promoted to general superintendent of the Lake division of the Pennsylvania at Cleveland, Ohio, replacing **James L. Cranwell**, who has been transferred to

the Western Pennsylvania division at Pittsburgh, Pa., succeeding **D. K. Chase**, who has been named assistant to the general manager at Pittsburgh. **C. W. Jeffries**, trainmaster of the New York division, has been promoted to superintendent of the Monongahela division at Pittsburgh, succeeding **Horace B. Stetson**, who, as reported in the *Railway Age* of November 20, succeeds Mr. Hofmann as superintendent of the Long Island at Jamaica.

Mr. Hofmann was born at Carnegie, Pa., on December 20, 1900, and received his early education at Carnegie high school and Pittsburgh Academy, later studying at the University of



Eugene L. Hofmann

Pittsburgh and Georgetown University. He entered railroad service as a messenger on the Pennsylvania's Panhandle division at the age of 16, while still attending school. After learning telegraphy, he worked in many capacities, such as telegraph operator, train dispatcher, movement director, assistant yardmaster and assistant trainmaster on the Panhandle and Pittsburgh divisions. In 1937 he was promoted to trainmaster on the Terre Haute division, later serving in the same capacity at Columbus, Ohio. In 1939 Mr. Hofmann was named acting manager of the Washington (D. C.) Terminal Company, and in November, 1940, was advanced to superintendent of the Long Island, which position he held until his recent promotion to general superintendent of the Lake division at Cleveland.

TRAFFIC

William F. Voil, assistant freight traffic manager of the New York, Ontario & Western at New York, has been promoted to freight traffic manager in charge of sales and service, with jurisdiction over all agencies. **F. J. Kinney**, general freight agent at New York, has been promoted to freight traffic manager in charge of rates and divisions, with jurisdiction over all rate matters. **Fred Bergheim**, general Eastern agent at New York, has been promoted to as-

sistant freight traffic manager in charge of the New York agency territory. **George Young**, commercial agent at New York, has been promoted to general Eastern agent, succeeding Mr. Bergheim. **J. M. Hurley**, assistant general freight agent at New York, has been promoted to general freight agent, succeeding Mr. Kinney. **F. X. Biasi** has been promoted to assistant to general freight agent at New York, succeeding **J. J. Donnelly**, who has been promoted to assistant general freight agent, to succeed Mr. Hurley.

D. I. Bowman, division freight agent of the Pennsylvania on special duty in the office of the general traffic manager at Philadelphia, Pa., has been promoted to assistant general freight agent, Eastern region, at Philadelphia. **R. W. Talbot**, division freight agent on special duty, Eastern region, at Philadelphia, succeeds Mr. Bowman. **R. F. G. Meyer**, chief clerk to the freight traffic manager at Chicago, has been promoted to division freight agent, special duty, Eastern region, Philadelphia.

Arthur C. Laberee, traveling freight and passenger agent of the Chicago, Rock Island & Pacific at Spokane, Wash., has been appointed general agent at that point.

James A. Stehle has been appointed coal freight agent of the Chicago, Indianapolis & Louisville, with headquarters at Chicago.

The Missouri-Kansas-Texas has announced the following changes in its traffic department: **T. A. Purnell**, division passenger agent at San Antonio, Tex., transferred to Houston, Tex.; **T. C. Connolly**, assistant division passenger agent at Dallas, Tex., appointed division passenger agent at San Antonio; **F. L. Cring**, city passenger agent at Dallas, promoted to assistant division passenger agent at that point; and **J. R. Terrill**, city passenger agent at Houston, advanced to assistant division passenger agent at Dallas.

F. H. Dowling, general freight agent of the Missouri-Kansas-Texas at Kansas City, Mo., has been advanced to the newly created position of assistant freight traffic manager at that point.

C. R. Warren, assistant industrial commissioner of the Chesapeake district of the Chesapeake & Ohio at Columbus, Ohio, has been appointed industrial commissioner of the Pere Marquette district at Detroit, Mich., succeeding **L. N. DeWeese**, deceased.

J. F. Finnegan, general superintendent dining car service of the Pennsylvania, with headquarters at Long Island City, N. Y., has been promoted to general passenger agent at New York, succeeding **Homes Bannard**, who has been appointed to the newly created post of manager of dining car service at New York. Mr. Finnegan was born in Chi-



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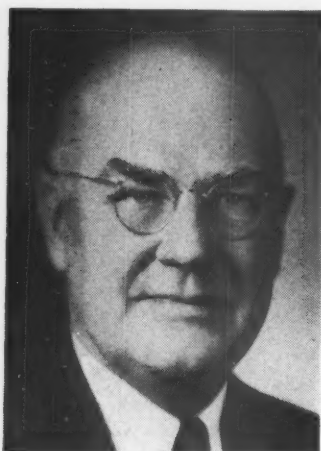
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for Cylinders and Valves
(Duplex Springs for Above
Sectional Packing)
Cylinder Snap Rings
Valve Rings, All Shapes

cago and completed his education in business schools of that city, entering the service of the Pennsylvania in 1911 in the Chicago passenger traffic offices. During World War I, he was assigned to special duties having to do with movement of supplies and materials overseas. Returning to passenger department work, Mr. Finnegan later served as superintendent of dining car service at Columbus, Ohio, and at Chicago. He became general superintendent dining car service on March 1, 1932.

SPECIAL

Harold C. Ahern, manager of the Boston & Maine Transportation Company (the automotive auxiliary of the Boston & Maine), has been elected president and general manager, effective December 1. Mr. Ahern entered the service of the Boston & Maine Transportation Company in 1926, becoming chief clerk in July, 1926, and assistant to the man-



Harold C. Ahern

ager of motor coaches in 1928. In 1929 he was appointed manager of the company, which now operates 120 buses about 6,000,000 bus miles a year. During the war Mr. Ahern was state chairman of buses for the Service & Supply division of the Massachusetts Committee on Public Safety.

Paul L. Pepper, general superintendent of the New York, Chicago & St. Louis at Bellevue, Ohio, has been appointed director of personnel, with headquarters at Cleveland, Ohio. **L. G. Mosher**, personnel assistant in the maintenance of way department at Cleveland, has been appointed assistant to the director of personnel. Born at Fairview, Pa., on August 21, 1892, Mr. Pepper first joined the Nickel Plate as telegraph operator at State Line, Pa., on September 25, 1909. He became relief agent at Buffalo, N. Y., in 1916 and advanced steadily until 1931, when he became assistant superintendent of the Buffalo-Cleveland division at Buffalo. On Jan-

uary 1, 1934, Mr. Pepper was appointed he held until May 16, 1944, when superintendent of the Buffalo-Cleveland



Paul L. Pepper

division at Conneaut, Ohio, which position he was promoted to general superintendent at Bellevue.

MECHANICAL

David C. Reid, general superintendent of motive power of the Boston & Maine and the Maine Central, with headquarters at Boston, Mass., has been appointed mechanical assistant of those roads, reporting to the general manager.

Paul C. Dunn, assistant general superintendent of motive power of the two roads, has been appointed superintendent of locomotive maintenance. The positions formerly held by Messrs. Reid and Dunn have been abolished. **James C. Marsh**, assistant superintendent of car maintenance, has been appointed superintendent of car maintenance, succeeding **Roy E. Baker**, who has been appointed assistant general manager. **Wallace E. Scragg**, division general car foreman at East Deerfield, Mass., has been appointed assistant superintendent of car maintenance, succeeding Mr. Marsh.

John N. Mathews, foreman Diesel shop, Central of Georgia, has been appointed general Diesel supervisor, with headquarters as before at Macon, Ga., succeeding **E. H. Holloway**, whose promotion to the newly-created position of superintendent Diesel maintenance at Macon was reported in the *Railway Age* of November 13.

OBITUARY

Malcolm H. McEwen, assistant to vice-president—traffic of the Chicago, Milwaukee, St. Paul & Pacific at Seattle, Wash., whose death on November 4 was reported in the *Railway Age* of November 13, was born on July 9, 1883, at Merchantville, N. J. He entered the service of the Milwaukee and its predecessor companies in 1901 as a clerk and stenographer in the freight department

at Chicago, and in 1906 he was appointed secretary to the president of the Chicago, Milwaukee & St. Paul Railway of South Dakota and Montana, with headquarters remaining at Chicago. From 1909 to 1912, Mr. McEwen served as chief clerk to the vice-president of the Chicago, Milwaukee & Puget Sound, and in 1913 became chief clerk to vice-president of the Chicago, Milwaukee & St. Paul (now C. M. St. P. & P.). He subsequently held positions as contracting freight agent at Chicago, traveling freight and passenger agent at Waterloo, Iowa, and as assistant commercial agent, general agent and city freight and passenger agent at Davenport, Iowa. On October 1, 1918, he was promoted to traffic representative of the vice-president at Chicago, and on November 16 of that year he was appointed chief clerk to the federal traffic manager at Chicago. Mr. McEwen was appointed general agent at Denver, Colo., in 1920, division freight and passenger agent at Dubuque, Iowa, in 1922, and general agent at Pittsburgh, Pa., in 1925. He was next sent to New York as general agent, in which post he remained until 1935, when he was promoted to general northwestern freight agent at Minneapolis, Minn. He was further advanced in 1938 to western traffic manager at Seattle, Wash., and in September of this year he was appointed assistant to vice-president—traffic at that point, which position he held at the time of his death.

David George Knight, chief claim agent of the New York Zone of the Pennsylvania and also of the Long Island, with headquarters at New York, died on November 16 at New York hospital, after a short illness. Mr. Knight was 65 years old.

Frank B. Townsend, executive vice-president of the Minneapolis Traffic Association at Minneapolis, Minn., died on November 10 in that city. Mr. Townsend was vice-president in charge of traffic of the Minneapolis & St. Louis from May, 1917, to July, 1923, and served as chief traffic officer for the receiver of that road from July, 1923, to July, 1925.

William R. Ganser, division engineer of the Pennsylvania at Chicago, died at his home in that city on November 9.

Joseph H. Conrad, trainmaster of the Chicago, Milwaukee, St. Paul & Pacific at Chicago, died at his home in that city on November 14.

Lon N. DeWeese, industrial commissioner of the Pere Marquette district of the Chesapeake & Ohio at Detroit, Mich., died in Ford hospital on October 29, at the age of 56.

W. D. Quarles, assistant chief of motive power, Atlantic Coast Line, died suddenly at Wilmington, N. C., on November 22.

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OPERATING REVENUES AND OPERATING EXPENSES OF CLASS I STEAM RAILWAYS IN THE UNITED STATES

Compiled from 127 monthly reports of revenues and expenses representing 131 Class I steam railways.

FOR THE MONTH OF AUGUST 1948 AND 1947

(Switching and Terminal Companies Not Included)

Item	United States		Eastern District		Southern District		Western District	
	1948	1947	1948	1947	1948	1947	1948	1947
Miles of road operated at close of month	226,912	227,371	53,494	53,731	46,125	46,157	127,293	127,483
Revenues:								
Freight	\$711,359,895	\$596,972,673	\$268,016,764	\$222,070,319	\$141,586,395	\$119,843,591	\$301,756,736	\$255,058,763
Passenger	92,511,040	94,002,303	46,699,964	47,266,923	13,739,741	14,151,708	32,071,335	32,583,672
Mail	16,068,788	11,456,041	6,105,815	4,504,500	2,716,792	1,951,401	7,246,181	5,000,080
Express	10,908,254	7,972,548	3,430,950	1,811,654	1,577,676	1,069,482	5,899,628	5,091,412
All other operating revenues	37,241,262	35,572,705	16,075,153	15,129,588	5,969,571	5,841,328	15,196,538	14,601,789
Railway operating revenues	868,089,239	745,976,270	340,328,646	290,782,984	165,590,175	142,857,570	362,170,418	312,335,716
Expenses:								
Maintenance of way and structures	121,073,611	106,692,134	46,379,234	40,838,144	24,779,417	21,988,289	49,914,960	43,865,701
Depreciation	10,413,873	10,174,785	4,384,251	4,324,751	1,849,105	1,756,267	4,180,517	4,093,770
Retirements	976,234	1,475,021	118,097	617,550	101,244	290,693	756,893	566,778
Deferred maintenance	*249,588	*656,168	*11,703	*14,581	*55,500	*17,404	*182,385	*624,183
Amortization of defense projects	151,871	420,033	14,748	*11,883	41,776	33,665	95,347	74,485
Equalization	*998,648	*2,377,298	*1,423,957	*2,114,941	200,944	*10,994	224,365	*251,363
All other	110,779,869	97,955,758	43,297,798	38,013,482	22,641,848	19,936,062	44,840,223	40,006,214
Maintenance of equipment	144,402,209	127,060,030	60,866,073	53,396,797	29,418,362	25,759,295	54,117,774	47,903,938
Depreciation	21,133,992	19,411,840	8,391,523	7,717,896	4,696,034	4,323,802	8,046,435	7,370,142
Retirements	*40,662	*43,701	*8,270	*6,829	*7,040	*20,741	*25,352	*16,131
Deferred maintenance and major repairs	*335,933	*230,606	*31,000	90,000	*173,823	*60,664	*131,110	*259,942
Amortization of defense projects	1,227,114	1,234,536	452,361	455,269	238,928	248,621	535,825	530,646
Equalization	*312,888	64,191	*67,659	48,444	*296,670	*84,754	51,441	100,501
All other	122,730,586	106,623,770	52,129,118	45,092,017	24,960,933	21,353,031	45,640,535	40,178,722
Traffic	15,758,200	14,637,142	6,538,584	5,019,256	3,366,612	3,087,418	6,853,004	6,530,468
Transportation—Rail line	321,975,092	286,419,228	134,396,788	122,418,894	58,565,911	52,029,918	129,012,393	111,970,416
Miscellaneous operations	11,755,367	11,471,778	4,257,741	4,211,210	1,636,126	1,527,679	5,861,500	5,732,889
General	22,397,375	19,675,875	8,384,967	7,439,522	4,842,091	4,211,965	9,170,317	8,024,388
Railway operating expenses	637,361,854	565,957,187	259,823,387	233,323,823	122,608,519	108,604,564	254,929,948	224,027,800
Net revenue from railway operations	230,727,385	180,020,083	80,505,259	57,459,161	42,981,656	34,253,006	107,240,470	88,307,916
Railway tax accruals	99,842,934	84,256,779	32,283,022	25,622,099	21,249,879	18,630,762	46,310,033	40,003,910
Pay-roll taxes	21,712,736	29,448,663	9,157,344	12,292,744	3,717,653	5,623,947	8,837,739	11,531,978
Federal income taxes	50,928,666	30,738,445	12,754,193	4,263,240	11,876,591	8,234,535	26,297,882	18,260,672
All other taxes	27,201,532	24,069,671	10,371,485	9,066,115	5,655,635	4,792,280	11,174,412	10,211,276
Railway operating income	130,854,451	95,763,304	48,222,237	31,837,062	21,731,777	15,622,244	60,930,437	48,303,998
Equipment rents—Dr. balance	12,229,657	11,233,172	4,659,104	4,119,371	*2,002,409	*1,084,210	9,572,962	8,198,011
Joint facility rent—Dr. balance	2,960,080	3,384,608	1,486,267	1,696,849	381,326	529,820	1,092,487	1,157,939
Net railway operating income	115,694,714	81,145,524	42,079,866	26,020,842	23,352,860	16,176,634	50,264,988	38,948,048
Ratio of expenses to revenues (percent)	73.4	75.9	76.3	80.2	74.0	76.0	70.4	71.7

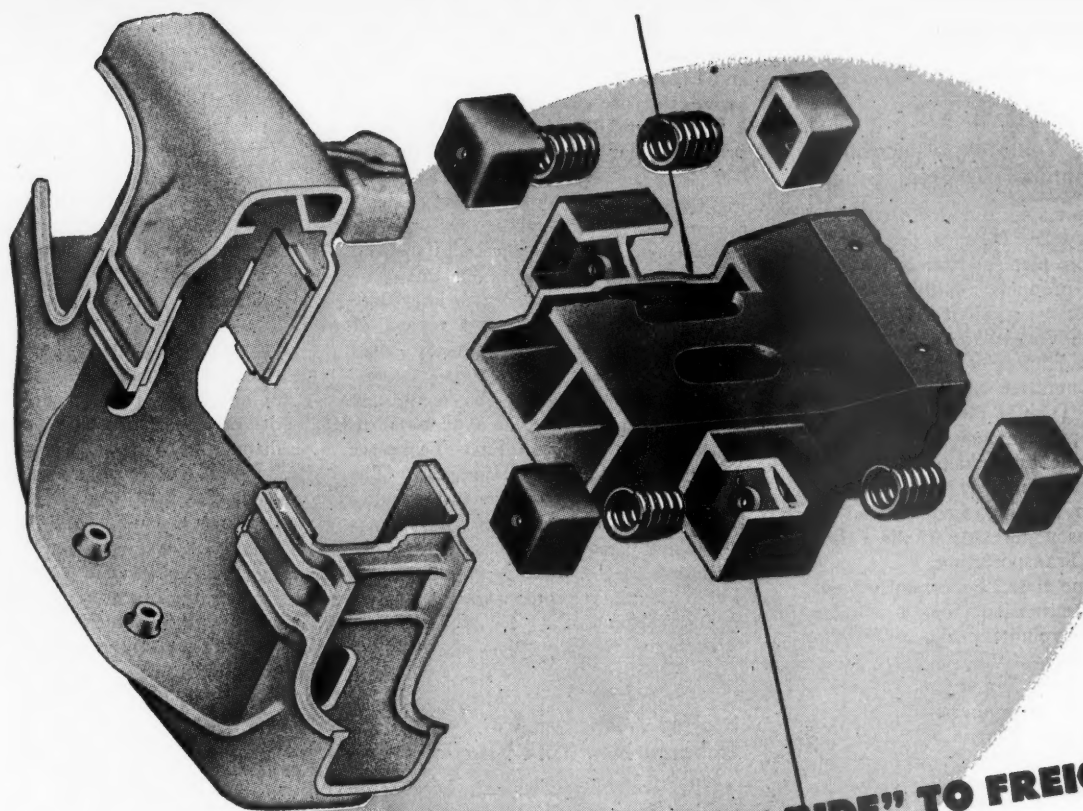
FOR THE EIGHT MONTHS ENDED WITH AUGUST 1948 AND 1947

Item	United States		Eastern District		Southern District		Western District	
	1948	1947	1948	1947	1948	1947	1948	1947
Miles of road operated at close of month	227,122	227,488	53,645	53,733	46,147	46,193	127,330	127,562
Revenues:								
Freight	\$5,201,584,549	\$4,531,340,695	\$1,987,920,525	\$1,728,473,064	\$1,077,971,321	\$951,975,580	\$2,135,692,703	\$1,850,892,051
Passenger	640,492,982	644,829,346	324,803,432	321,995,867	102,094,047	105,954,727	213,595,503	216,878,752
Mail	123,053,805	90,556,124	44,257,233	34,077,097	22,261,198	16,203,434	56,535,374	40,275,593
Express	78,435,988	77,152,254	26,037,724	23,249,905	13,556,847	13,973,761	38,841,417	39,928,588
All other operating revenues	273,234,717	260,675,694	120,591,405	115,081,641	45,741,514	44,326,901	106,901,798	101,267,152
Railway operating revenues	6,316,802,041	5,604,554,113	2,503,610,319	2,222,877,574	1,261,624,927	1,132,434,403	2,551,566,795	2,249,242,136
Expenses:								
Maintenance of way and structures	886,242,507	782,447,045	327,915,318	284,202,349	185,794,308	171,300,609	372,532,881	326,944,087
Depreciation	82,790,040	81,055,561	35,130,694	34,648,707	14,419,545	13,888,771	33,239,801	32,518,083
Retirements	7,611,714	6,503,947	1,976,959	1,617,885	848,299	1,602,018	4,786,456	3,284,044
Deferred maintenance	*2,697,350	*3,527,270	*83,536	*198,237	*839,416	*190,672	*1,774,398	*3,138,361
Amortization of defense projects	1,425,654	854,614	108,541	74,514	347,531	245,972	969,582	534,128
Equalization	1,470,824	2,000,990	*710,741	*431,926	1,989,579	837,959	191,986	1,594,957
All other	795,641,625	695,559,203	291,493,401	248,491,406	169,028,770	154,916,561	335,119,454	292,151,236
Maintenance of equipment	1,113,837,074	1,010,510,118	473,488,499	432,220,573	225,572,486	204,978,760	414,776,089	373,310,785
Depreciation	163,655,536	153,297,553	64,542,668	61,693,624	36,367,189	33,669,192	62,745,679	57,934,737
Retirements	*762,309	*297,768	*90,659	*50,642	*153,131	*90,396	*518,519	*156,730
Deferred maintenance and major repairs	*2,712,645	*3,139,142	*32,000	87,180	*843,028	*1,253,593	*1,837,617	*1,972,729
Amortization of defense projects	9,853,188	9,972,955	3,617,687	3,707,794	1,911,589	2,002,464	4,323,912	4,262,697
Equalization	1,565,976	617,572	456,627	*14,384	1,098,196	530,225	11,153	101,731
All other	942,237,328	850,058,948	404,994,176	366,797,001	187,191,671	170,120,868	350,051,481	313,141,079
Traffic	127,029,984	114,370,156	43,474,436	39,535,207	27,825,554	24,398,357	55,729,994	50,436,592
Transportation—Rail line	2,518,319,334	2,221,570,790	1,069,887,305	965,151,333	467,973,886	414,008,331	980,458,143	842,411,126
Miscellaneous operations	87,839,930	84,169,222	33,224,320	31,299,739	13,190,955	12,462,779	41,424,655	40,406,704
General	179,169,163	158,279,431	68,305,663	61,088,331	38,972,676	34,428,729	71,890,824	62,762,371
Railway operating expenses	4,912,437,992	4,371,346,762	2,016,295,541	1,813,497,532	959,329,865	861,577,565	1,936,812,586	1,696,271,665
Net revenue from railway operations	1,404,364,049	1,233,207,351	487,314,778	409,380,042	302,295,062	270,856,838	614,754,209	552,970,471
Railway tax accruals	657,628,685	611,167,738	228,465,695	207,176,482	151,597,877	141,543,590	277,565,113	262,447,666
Pay-roll taxes	c177,815,202	228,774,294	73,913,747	95,713,686	35,426,475	44,683,272	68,474,980	88,377,336
Federal income taxes	271,871,270	196,160,737	75,266,374	39,861,575	72,862,198	58,519,604	123,742,698	97,779,558
All other taxes	207,942,213	186,232,707	79,285,574	71,601,221	43,309,204	38,340,714	85,347,435	76,290,772
Railway operating income	746,735,364	622,039,613	258,849,083	202,203,560	150,697,185	129,313,248	337,189,096	290,522,805
Equipment rents—Dr. balance	89,238,530	83,114,589	40,567,800	38,160,714	*9,491,883	*3,787,300	58,162,613	48,741,175
Joint facility rent—Dr. balance	25,797,593	27,386,506	12,365,996	13,337,499	3,726,897	4,243,299	9,704,700	9,805,708
Net railway operating income	631,699,241	511,538,518	205,915,287	150,705,347	156,462,171	128,857,249	269,321,783	231,975,922
Ratio of expenses to revenues (percent)	77.8	78.0	80.5	81.6	76.0	76.1	75.9	75.4

c Includes credits amounting to \$38,245,234 for reduction in unemployment insurance from 3.0 percent to 0.5 percent retroactive to January 1, 1948.

* Decrease, deficit, or other reverse item.

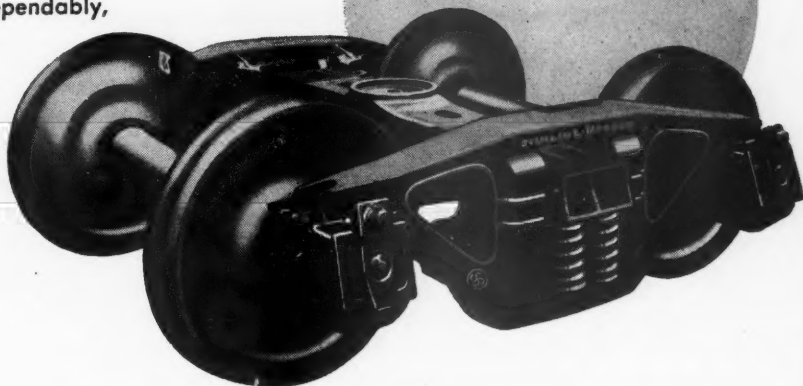
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.



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November 27, 1948

General News

(Continued from page 47)

Extension of Voluntary Allocations Program Approved by Steel Group

Extension for a six months' period beyond February 28, 1949, of the voluntary allocation plan providing 250,000 tons of steel products monthly for the repair and construction of freight cars was approved November 19 by the Department of Commerce's Steel Products Advisory Committee at a meeting in Washington, D. C. The allocation is expected to provide sufficient steel to meet the present production goal of 10,000 new cars monthly. Among those attending the meeting was Colonel J. Monroe Johnson, director of the Office of Defense Transportation.

At the same time, the committee approved the extension for a similar period of the voluntary allocation programs providing 40,380 tons of steel products monthly for the construction and repair of oil tankers, 15,190 tons of steel products monthly for the construction and repair of merchant vessels, 25,000 tons of steel products monthly for the construction and repair of inland waterway barges and 16,530 tons of steel products monthly for oil field tank and production equipment.

The amount approved for the construction and repair of merchant vessels and barges is an increase of 5,000 tons above the present monthly allocation.

The committee also approved a proposed plan which would make 26,000 tons of steel products available monthly, effective during next February, for the manufacture of mining machinery. It was agreed that the quantity of steel involved in this program might be increased at a later date following further study and review of the mining machinery industry steel supply situation.

Among other things, the committee deferred consideration of a proposal to provide pipe for the East Tennessee Natural Gas Pipeline Company. The proposal was referred back to the Office of Industry Cooperation for further study and review, the committee indicating, however, that it would underwrite the requirements for this project when problems of a "technical nature" have been solved.

Express Agency, P.R.R., Embargo New York Traffic

Effective November 23, because of a slow-down among its 8,000 clerks and freight handlers, the Railway Express Agency placed an embargo on its rail and air traffic in the New York

Metropolitan area. The slow-down which resulted in the embargo was initiated by members of the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees following dismissal of 13 agency employees. They were discharged, according to A. M. Hartung, R. E. A. vice-president—personnel, for "giving materially false information in their applications for employment, generally by the concealment of criminal records." The embargo, which does not apply to incoming carloads at least 85 per cent filled, is expected to result in layoffs of many of the agency's New York drivers, who are not involved in the dispute.

Due to a separate strike of New York truck drivers, the Pennsylvania has also embargoed all l.c.l. shipments, except military and medical supplies, consigned to stations in the New York boroughs of Manhattan and Brooklyn and Jersey City, N. J.

The embargo placed by the Car Service Division, Association of American Railroads, because of the strike of longshoremens at Atlantic ports has been extended to Port Newark, N. J., and Portland, Me., and to shipments destined for coastwise movements by water as well as for export. In addition to Port Newark and Portland, the embargo covers Boston, Mass., New York, Philadelphia, Pa., Wilmington, Del., Baltimore, Md., and Hampton Roads, Va.

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WILLSON PRODUCTS, INC., 241 WASHINGTON ST., READING, PA.

S. F. to Abolish Division

The Atchison, Topeka & Santa Fe will abolish its Southern Kansas division on November 28. Jurisdiction over the Howard, Virgil, Fredonia and Girard districts of the abolished division will be given to the Eastern division, and the First, Second, Pawhuska and Coffeyville districts will be transferred to the jurisdiction of the Oklahoma division.

Official-Southwestern Divisions Probe Reset for Hearing Jan. 4

Acting upon a request of Southwestern territory respondents, the Interstate Commerce Commission has set back from November 29 to January 4, 1949, the hearing date with respect to the investigation which it has instituted into the reasonableness of the present primary divisions of interterritorial joint class and all-commodity rates between points in Official territory and points in Southwestern territory. The hearing will be held at the commission's Washington, D.C., offices, before Examiner Hosmer.

The commission also has extended from February 10, 1949, to February 24, 1949, the time within which Southwestern and Southern territory respondents shall prepare their testimony in writing and furnish copies thereof, together with exhibits, to counsel for the Official territory respondents and to the commission.

Build lightweight cars with **Mayari R**



★ Save Steel ★ Reduce Deadweight ★ Cut Operating Costs ★ Decrease Maintenance Expense

Any way you look at it, you're justified in considering the use of low-alloy, high-strength Mayari R in your car-replacement program.

In the first place, with Mayari R it takes less steel to build a car of any given capacity. Mayari R's high yield point and high tensile strength allow a considerable reduction in the thickness of members. The total deadweight of the car can be made considerably lower than that of a comparable car built from ordinary carbon steel.

This deadweight reduction multiplied by thousands of cars means a saving in motive power. It means less wear on wheels, axles, trackage and other components.

Maintenance on the car structure is reduced and service life is extended where Mayari R is used. This is the result of Mayari R's greater resistance to

atmospheric corrosion, its better resistance to abrasion and impact, and the fact that paint lasts longer on a surface of Mayari R than on plain carbon steel.

For full information on this steel and its many railway applications, write or call our nearest office.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by
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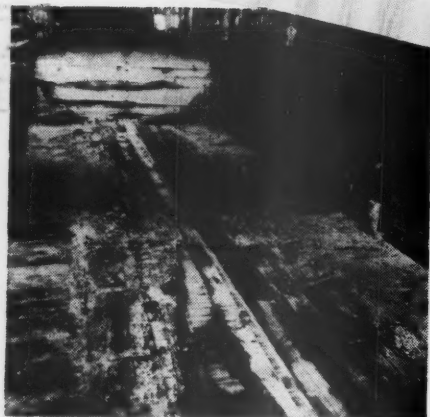


Mayari R *makes it lighter...stronger...longer lasting*

→ → "Since the cost per unit of most building materials installed today is more than twice what it was before the war, building must be more permanent, so that maintenance costs will be reduced to the absolute minimum."

P. O. Ferris, Chief Engineer
Delaware and Hudson Railroad

You can see
the difference
with
Pressure-Creosoted
Wood



The ravages of weather undoubtedly promoted decay in the untreated decking of this car, causing "mechanical failure" after only 5 years of service . . .



but the pressure-treated decking of this car resisted the weakening influences of wear and weather for 14 years before it was sent in for its first major repairs.

Today, the use of Koppers Pressure-Creosoted Wood, which frequently multiplies the service life of car decking, is one practical way of solving the problem of increased car material costs. Not only in gondola, flat and stock cars, but in crossings, bridges, pile foundations, pole lines, platforms and other installations, Koppers PRESSURE-CREOSOTED Wood will last longer, cut maintenance costs and boost your margin of profit.



PRESSURE-TREATED WOOD

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Current Publications

ARTICLES IN PERIODICALS

Errand Boy No. 1, by Arthur W. Baum. *Saturday Evening Post*, October 16 and October 23, 1948. Published by Curtis Publishing Company, Independence square, Philadelphia 5, Pa. Single copies, 15 cents.

The nation's chief parcel boy, Railway Express Agency, Inc., maintains America's 109-year-old express tradition by toting considerably more than 200,000,000 packages a year across the country. The many ramifications of the express business as carried on by R. E. A. are recounted by Mr. Baum. He tells of the varied shipments handled, and how they are handled; how the company was organized and how it operates; how it handles loss and damage claims; how parcel post service has affected it; and how it entered and handles air express service. This is an enlightening article about a part of railroad service of which the general public is probably not too well-aware.

Santa Fe: No. 1 Railroad. *Fortune*, November, 1948, pp. 122, et seq. Published by Time, Inc., 350 E. 22nd st., Chicago 16, Ill. Single copies, \$1.25.

Although the Santa Fe lays no claim to the title of the world's no. 1 railroad, as this article notes, the author thinks there is little doubt of its deserving such an appellation. He says its present eminence in the field is due to conservative financing, progressive operation and some good luck. The article goes into some details of all the factors which the author feels have brought the Santa Fe to its present high state, including Mr. Gurley, the Diesel locomotive, plowing back of part of its profits to make improvements, etc.

Traveling by Rail, *Railway Progress*, October, 1948. Published by The Federation for Railway Progress, P. O. Box 6539, Terminal Tower, Cleveland 1, O.

Titled the "Traveling by Rail" issue, it contains, among other articles, one entitled "Across the Continent at Standard Fare", by Ann Stevenson. Miss Stevenson describes in an amusing manner a trip she made on standard service trains, not on the "big, extra-fare name trains that lend their glamour to railroad travel advertisements." Some of the trains and service were good and some not so good, and she suggests a number of simple improvements that the railroads could make on standard service without any great investment in new equipment. Another article deals with commissions for travel agents. It is written by Richard Hall, president of Travel, Inc., and he suggests that it would be to the advantage of the railroads to pay commissions, and explains why. Of the Rail Travel Promotion Agency he says, "The entire procedure is hedged with so many restrictions and guided by such volumes of directives that it is a prize example of red tape in business."